PLURISTEM THERAPEUTICS INC
Form 10-K
September 23, 2009

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

FORM 10-K

(Mark One)

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended **June 30, 2009**

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from [ ] to [ ]

Commission file number **001-31392**

PLURISTEM THERAPEUTICS INC.

(Name of registrant as specified in its charter)

Nevada	**98-0351734**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
MATAM Advanced Technology Park, Building No. 20, Haifa, Israel	**31905**
(Address of principal executive offices)	(Zip Code)

Registrant s telephone number **011-972-74-7107171**

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

Title of each class	Name of each exchange on which registered
Common Stock, par value $0.00001	**Nasdaq Capital Market**

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

None.

(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 o No x

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 o No x

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 x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

o Yes o No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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 Part III of this Form 10-K or any amendment to this Form 10-K. x

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

Large accelerated filer o Accelerated filer o Non-accelerated filer o
Smaller reporting company x
(do not check if a smaller reporting company)
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).
Yes o No x

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 prices of such common equity, as of the last business day of the registrant s most recently completed second fiscal quarter.

$4,528,717

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

15,796,181 as of September 10, 2009

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Our financial statements are stated in thousands United States Dollars (US$) and are prepared in accordance with United States Generally Accepted Accounting Principles (U.S. GAAP).

In this annual report, unless otherwise specified, all dollar amounts are expressed in United States dollars.

As used in this annual report, the terms we , us , our , the Company , and Pluristem mean Pluristem Therapeutics Inc. and our wholly owned subsidiary, unless otherwise indicated.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The statements contained in this Annual Report on Form 10-K that are not historical facts are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. Such forward-looking statements may be identified by, among other things, the use of forward-looking terminology such as believes, intends, plans expects, may, will, should, or anticipates negative thereof or other variations thereon or comparable terminology, and similar expressions are intended to identify forward-looking statements. We remind readers that forward-looking statements are merely predictions and therefore inherently subject to uncertainties and other factors and involve known and unknown risks that could cause the actual results, performance, levels of activity, or our achievements, or industry results, to be materially different from any future results, performance, levels of activity, or our achievements, or industry results, expressed or implied by such forward-looking statements. Such forward-looking statements appear in Item 1 Business and Item 7 Management s Discuss and Analysis of Financial Condition and Results of Operations, as well as elsewhere in this Annual Report and include statements regarding the following: the expected development and potential benefits from our products in treating various medical conditions, progress in our efforts to continue with clinical trials and achieve regulatory approvals, the potential market demand for our products, our expectations regarding our short- and long-term capital requirements, our outlook for the coming months and information with respect to any other plans and strategies for our business.

The factors discussed herein, including those risks described in Item 1A. Risk Factors , and expressed from time to time in our filings with the Securities and Exchange Commission could cause actual results and developments to be materially different from those expressed in or implied by such statements. The forward-looking statements are made only as of the date of this filing, and we undertake no obligation to publicly update such forward-looking statements to reflect subsequent events or circumstances.

PART I

Item 1. Business.

Corporate History

We develop and intend to commercialize, cell therapy production technologies and products. We were incorporated in the State of Nevada under the name A.I. Software, Inc. on May 11, 2001. On June 10, 2003, we acquired from the Weizmann Institute of Science and the Technion-Israel Institute of Technology 100% of the issued and outstanding shares of a research and development company based in Israel called Pluristem, Ltd., which is now our wholly owned subsidiary.

On June 25, 2003, we changed our name from A.I. Software, Inc. to Pluristem Life Systems, Inc. From May 2003 until March 2006, our business was focused on the development of cell therapy production technologies for license to medical scientists and practitioners for their use in producing cell therapy products for sale. In March 2006, we changed our business model to focus on developing this technology in order to produce cell therapy products that we would sell ourselves. In July 2006, we achieved a breakthrough in our preclinical study of bone marrow transplantation: the preclinical study showed that by adding our PLX cells (PLacenta eXpanded cells) to umbilical cord blood (UCB) stem cells during bone marrow transplantation (BMT), hematopoietic stem cell engraftment in mice showed up to a 500% increase in engraftment after irradiation and chemotherapy. In January 2008,we achieved favorable results in demonstrating a revascularization effect after using our proprietary PLX-PAD cells for the treatment of limb ischemia associated with peripheral artery disease (PAD). In April 2008, an additional pre-clinical study utilizing our proprietary PLX cells in treating ischemic stroke showed statistical significance utilizing functional as well as anatomical endpoints.

On November 23, 2007, we changed our name to Pluristem Therapeutics Inc.

On December 10, 2007, our shares of common stock began trading on the NASDAQ Capital Market under the symbol PSTI. The shares were previously traded on the OTC Bulletin Board under the trading symbol PLRS.OB . On May 7, 2007, our shares also began trading on the Frankfurt Stock Exchange, under the symbol PJT.

In March 2009, the U.S. Food and Drug Administration cleared our Investigational New Drug application to initiate a Phase I clinical trial for the treatment of critical limb ischemia using our PLX-PAD product.

In June 2009, the Paul Ehrlich Institute (PEI), the German competent authority in the European Union, approved our clinical trial application (CTA) and granted approval for us to begin clinical trials with our proprietary placental-derived adherent stromal cell product, termed PLX-PAD.

In July 2009, the first patient was enrolled in a Phase I clinical trial of our PLX-PAD product at the Franziskus-Krankenhaus Hospital, Berlin.

In September 2009, we began enrolling patients in the U.S. for a Phase I clinical trial of our PLX-PAD product. The Phase I study is designed to evaluate the safety of PLX-PAD in patients with critical limb ischemia (CLI). On September 23, 2009 we announced the dosing of the first patient in the U.S. with our PLX-PAD product.

Our Current Business

Pluristem Therapeutics Inc. is a bio-therapeutics company dedicated to the commercialization of non-personalized (allogeneic) cell therapy products for the treatment of several severe degenerative, ischemic and autoimmune disorders. The Company is developing a pipeline of products, stored ready-to-use, that are derived from human placenta, a non-controversial, non-embryonic, adult stromal cell source.

These placental adherent stromal cells (ASCs) are grown in the Company s proprietary PluriX three-dimensional bioreactor, which imitates the natural microstructure of bone marrow and does not require supplemental growth factors or other exogenous materials.

Pluristem s first product in development, PLX-PAD, is intended to improve the quality of life of millions of people suffering from peripheral artery disease (PAD). The Company is in process of identifying its next clinical indication. The Company s main focus at this time is in the development of product candidates intended for local administration for indications such as: PAD, CLI, intermittent claudication, neuropathic pain, wound healing and orthopedic injuries. Additionally, the Company has reported favorable results administering PLX cells in systemically administration for indication such as: inflammatory bowel disease (IBD), multiple sclerosis, bone marrow transplantation (BMT) and ischemic stroke.

Once we have products ready for commercialization, we will evaluate our various sale and marketing alternatives, including licensing of our technology to other companies, manufacturing and direct sales or entering into marketing collaborations.

Scientific Background

Stem cells are unspecialized cells that can renew themselves for long periods through cell division and have the ability to differentiate into specialized cells. Stem cells are separated from other cells within the body by three general properties:

- they are capable of self-division and self-renewal over long time periods;
- they are unspecialized; and
- they can give rise to specialized cells.

Stem cells offer the possibility of renewable sources of replacement cells and new tissues to treat many kinds of diseases, conditions, and disabilities. All stem cells originate from three places: certain adult tissues (adult); UCB (umbilical); and the human embryo (embryonic). Stem cells obtained from a person after birth are adult stem cells and are found within various tissues that make up the body. These stem cells act as a repair and maintenance system, dividing regularly to provide the body with specialized cells to take the place of those that perish. Pluristem s technology employs only adult adherent stem cells from the placenta.

Our Technology

We are dedicated to the commercialization of non-personalized (allogeneic) cell therapy products. We are expanding non-controversial placental-derived adherent stromal cells (ASCs) via a proprietary 3D process, termed PluriX , into therapeutics for a variety of degenerative, malignant and autoimmune disorders.

The PluriX imitates the natural microstructure of bone marrow and does not require supplemental growth factors or other exogenous materials. Our PluriX Bioreactor System uses a three-dimensional system of stromal cell cultures and substrates to create an artificial physiological environment where placental stem cells (obtained after birth) can naturally grow and reproduce outside of the human body without any use of exogenous biologics or pharmacologicals. Using a natural growth mechanism eliminates the risk of genetic instability. Unlike conventional two-dimensional culturing methods, our three-dimensional microenvironment closely resembles the structure and function of the body s bone marrow environment. Our system aims to trick stem cells into growing and reproducing in the same way they would in living organs. Because the size and scale of the PluriX Bioreactor is larger than that of human bone marrow, stem cell growth can be greatly expanded. After the ASCs are grown in our PluriX reactor, the cells are then separated from the three-dimensional culture.

We believe that the resultant PLX (PLacental eXpanded) cell efficacy may be related to the secretion of cytokines or other potent immune modulators. Furthermore, PLX cells are immune privileged and have immunomodulatory properties, thus protecting the recipient from immunological reactions that often accompany transplantations.

Product Candidates

PLX-PAD

We are developing PLX-PAD cells as an allogeneic therapeutic product to treat CLI which results from PAD. Like all of our other stem cells, PLX-PAD cells are to be stored ready to use and shipped to hospitals and clinics for use as an intra-muscular treatment for the affected limb of a patient suffering from CLI. In 2008, we completed safety and bio-distribution studies in non-obese, diabetic, severe combined immunodeficient (NOD/SCID) mice. These studies indicated a statistically significant increase in new vessel formation (angiogenesis) and blood flow in an affected limb treated with PLX-PAD cells. In March 2009, the U.S. Food and Drug Administration cleared our Investigational New Drug application to initiate a Phase I clinical trial for the treatment of critical limb ischemia using our PLX-PAD product.

In June 2009, the Paul Ehrlich Institute (PEI), the German competent authority in the European Union, approved our clinical trial application (CTA) and granted approval for us to begin clinical trials of PLX-PAD.

In July 2009, the first patient was enrolled in a Phase I clinical trial of our PLX-PAD product at the Franziskus-Krankenhaus Hospital, Berlin.

In September 2009, we began enrolling patients in the U.S. for a Phase I clinical trial of our PLX-PAD product. The enrollment began at the Center for Therapeutic Angiogenesis in Birmingham, Alabama. In addition, Duke University Medical Center will be screening patients for the trial. The Phase I study is designed to evaluate the safety of PLX-PAD in patients with CLI. A total of up to 12 adults with the disease will be included in this dose escalating trial. On September 23, 2009 we announced the dosing of the first patient in the U.S. with our PLX-PAD product.

Critical Limb Ischemia

Peripheral artery occlusive disease (PAOD), also known as peripheral vascular disease (PVD) or, more commonly, PAD is a term used to describe diseases caused by the obstruction of peripheral arteries resulting from atherosclerosis or other inflammatory processes that can lead to ischemia. CLI is the severe subset and natural endpoint of PAD.

PAD and CLI are aggravated by conditions such as hypercholesterolemia, smoking and diabetes with the incidence doubling in patients with these risk factors. One system for staging peripheral artery disease severity is the Rutherford categories 1 through 6, with critical limb ischemia defined by category 4 (ischemic rest pain), category 5 (minor tissue loss), and category 6 (ulceration or gangrene). The severity of the manifestations is often a reflection of the degree of obstruction in the arterial perfusion of the extremity. Analysis of data from the 2009 update on heart disease and stroke statistics published in the journal *Circulation* (*Circulation.* 2009;119:e21-e181. Published online before print December 15, 2008) indicates that approximately 8 million people over the age of 40 in the United States are with afflicted with PAD. PAD increases significantly with age, rising to as high as approximately 20% of the population of those over the age of 70, which has resulted in a growing market for therapies intended to treat this disorder. It has been estimated that CLI affects approximately 1.1 million U.S. patients and is anticipated to grow to approximately 1.4 million patients by 2015 according to The Sage Group Report of September 12, 2005. This could result in approximately 160,000 to 200,000 PAD-amputations performed annually in the United States.

Additionally we have reported favorable results administering PLX cells in systemically administration in several indications, the table below summaries the status of these studies:

Product	For the treatment of	Status
PLX-IBD	Inflammatory bowel disease	Pre- Clinical
PLX-STROKE	Ischemic stroke	Pre- Clinical
PLX-BMT	Bone marrow transplantation	Pre- Clinical
PLX-MS	Multiple sclerosis	Proof of concept

Intellectual Property

Our success will depend in part on our ability to protect our technology and products with patents. Our technology is patented in the U.S., Australia, Russia, Mexico, China, Hong Kong, India, New Zealand and South Africa. The earliest of these patents will expire in 2020. In addition, we have patents pending in Europe, Canada, Japan and other countries.

The patents included in our portfolio address the composition, processes and therapeutic use of adherent stromal cells. We are committed to protecting our intellectual property position and to aggressively pursue our patent portfolio.

Through our experience with ASC-based product development, we have developed expertise and know-how in this field. We are in the final stage of building our ability to manufacture clinical grade ASCs in-house. To protect this non-patentable know-how, our policies require confidentiality agreements with our employees, consultants, contractors, manufacturers and advisors. These agreements generally provide for protection of confidential information, restrictions on the use of materials and assignment of inventions conceived during the course of performance for us. These agreements might not effectively prevent disclosure of our confidential information.

We fully own our intellectual property and we have no obligations to pay royalties to any third party, except for royalties to the OCS (see note 7D in our audited consolidated financial statements for fiscal 2009 included elsewhere in this Form 10-K).

Research and Development

We spent on research and development $3,141,000 and $4,393,000 on fiscal year 2009 and 2008, respectively.

Foundational Research. Our core technology, the PluriX Bioreactor system, was developed by our former Chief Technology Officer, Dr. Shai Meretzki of the Technion - Israel Institute of Technology s Rappaport Faculty of Medicine. Dr. Meretzki also worked in close collaboration with Professor Dov Zipori and Dr. Avinoam Kadouri of the Weizmann Institute of Science. Professor Zipori specializes in cultures and stromal cells and Dr. Kadouri specializes in the planning and creation of bioreactors.

Ongoing Research and Development Plan.

In July 2007, we entered into a five years collaborative research agreement with the Center for Regenerative Therapies at Charite University Hospital of Berlin (BCRT). Pluristem and BCRT are collaborating on a variety of indications utilizing adherent stromal cells derived from the placenta that have been expanded in the Company s proprietary bioreactor. The initial successful project collaboration was for developing and characterizing the mechanism of action of the PLX-PAD cells in allogeneic therapeutic product to treat CLI, which results from peripheral artery disease PAD. According to the agreement, we will be the exclusive owner of the technology and any products produced as a result of the collaboration. In December 2008 we have entered into a clinical trials agreement with the BCRT, and accordingly the BCRT will be one of our clinical sites in Germany for the CLI clinical trials.

Our research and development facilities are in Haifa, Israel. The facility has been approved as a Good Manufacturing Practices (GMP) standard site for the purpose of manufacturing PLX cells by an inspector from the European Medicines Agency (EMEA). In addition, the U.S. Food and Drug Administration (FDA) approved the design of the clean room. The research and development facilities include 13,800 square feet in total.

We receive the placentas used for our research activities from hospitals in Israel. Any medical waste related to the use of placentas is treated in compliance with environmental laws and standards.

Government Regulation

The development, manufacture, commercialization and reimbursement of our cell therapy product candidates are subject to the laws and regulations of governmental authorities in the U.S. and other countries in which our products will be marketed in the future. Specifically, in the U.S., the FDA, among other activities, regulates new product approvals to establish safety and efficacy of these products, furthermore, various governmental statutes and regulations also govern or influence testing, manufacturing, safety, labeling, storage and record keeping related to such products and their marketing. Governments in other countries have similar requirements for testing and marketing.

Regulatory Process in the United States

Our product candidates are subject to regulation as biological products under the Public Health Service Act and the Food, Drug and Cosmetic Act. The FDA generally requires the following steps for pre-market approval or licensure of a new biological product:

- Preclinical laboratory and animal tests conducted in compliance with the FDA s Good Laboratory Practice, or GLP, requirements to assess a drug s biological activity and to identify potential safety problems, and to characterize and document the product s chemistry, manufacturing controls, formulation, and stability. We conduct preclinical testing for internal use and as support for submissions to the FDA. Preclinical testing generally included various types of in-vitro laboratory evaluations of the PLX-PAD product candidate as well as animal studies to assess the safety and the functionality of the product,

- Submission to the FDA of an Investigational New Drug, or IND application, which must become effective before clinical testing in humans can begin; following submission of the IND, the FDA has 30 days to review the application and raise safety and other clinical trial issues. If we are not notified of objections within that period, clinical trials may be initiated, and human clinical trials may commence at a specified number of investigational sites with the number of patients approved by the FDA. We have submitted one IND for our PLX-PAD product candidate, and we are conducting a clinical study under this IND.

- Obtaining approval of Institutional Review Boards, or IRBs, of research institutions or other clinical sites to introduce the biologic drug candidate into humans in clinical trials; adequate and well-controlled human clinical trials to establish the safety and efficacy of the product for its intended indication conducted in compliance with the FDA s Good Clinical Practice, or GCP, requirements. We have obtained approval from two IRBs: (i) Western Institutional Review Board or WIRB, on behalf of the Center for Therapeutic Angiogenesis in Birmingham, Alabama, (ii) The Duke University Health System Institutional Review Board or DUHS IRB, on behalf of Duke University Medical Center. Our phase I study utilizing our PLX-PAD product candidate for the treatment of Critical Limb Ischemia patients,

- Compliance with current Good Manufacturing Practices, or cGMP regulations and standards;

- Submission to the FDA of a Biologics License Application, or BLA, for marketing that includes adequate results of preclinical testing and clinical trials;

FDA reviews the marketing application in order to determine, among other things, whether the product is safe, effective and potent for its intended uses; and obtaining FDA approval of the BLA, including inspection and approval of the product manufacturing facility as compliant with cGMP requirements, prior to any commercial sale or shipment of the pharmaceutical agent.

The FDA may also require post-marketing testing and surveillance of approved products, or place other conditions on the approvals.

Regulatory Process in Europe

The European Union (EU) has approved a regulation specific to cell and tissue products and our PLX-PAD cell therapy product candidate is regulated under this Advanced Therapy Medicinal Product (ATMP) regulation, or the EU Directive.

For products that are regulated as an ATMP, the EU Directive requires:

(i) Preclinical laboratory and animal testing;

(ii) Filing a Clinical Trial Application (CTA) with an Investigational Medicinal Product Dossier (IMPD) with the Competent Authority of each EU Member State (MS) in which it intends to conduct human clinical trials. The MS Competent Authority has 90 days to review the application and raise safety and other clinical trial issues. The EU Clinical Directive allows the Competent Authority to extend this review period if it deems it necessary for the safety of the patient or if it needs additional time to conduct a thorough review.

(iii) Obtaining approval of Ethic Committees of research institutions or other clinical sites to introduce the biologic drug candidate into humans in clinical trials; adequate and well-controlled human clinical trials to establish the safety and efficacy of the product for its intended indication conducted in compliance with the Good Clinical Practice requirements.

(iv) Adequate and well-controlled clinical trials to establish the safety and efficacy of the product for its intended use;

(v) Submission to EMEA for a Marketing Authorization (MA); and,

(vi) Review and approval of the MA.

We have submitted and obtained approval for one CTA for our PLX-PAD product in Germany, and we have obtained approval from the local Ethic Committee of Berlin and are conducting a clinical study under this approval for our phase I study utilizing the PLX-PAD product for the treatment of Critical Limb Ischemia patients.

Employees

We presently employ a total of 34 full-time employees and 3 part-time employees, of whom 28 full-time employees and 2 part-time employees are engaged in research.

Competition

The cellular therapeutics industry, of which we are a part, is subject to technological changes that can be rapid and intense. We have faced, and will continue to face, intense competition from biotechnology, pharmaceutical and biopharmaceutical companies, academic and research institutions and governmental agencies engaged in cellular therapeutic and drug discovery activities or funding, both in the United States and internationally. Some of these competitors are pursuing the development of cellular therapeutics, drugs and other therapies that target the same diseases and conditions that we target in our clinical and pre-clinical programs.

We are aware of many companies working in this area, including: Osiris Therapeutics, Aastrom Biosciences, Cytori Therapeutics, Gamida Cell, Geron, Mesoblast and Celgene. We expect to compete based upon, among other things, our intellectual property portfolio, our manufacturing efficiencies and the efficacy of our products. Our ability to compete successfully will depend on our continued ability to attract and retain experienced and skilled executive, scientific and clinical development personnel to identify and develop viable cellular therapeutic candidates and exploit these products commercially.

Item 1A. Risk Factors.

The following risk factors, among others, could affect our actual results of operations and could cause our actual results to differ materially from those expressed in forward-looking statements made by us. These forward-looking statements are based on current expectations and we assume no obligation to update this information. You should carefully consider the risks described below and elsewhere in this annual report before making an investment decision. Our business, financial condition or results of operations could be materially adversely affected by any of these risks. Our common stock is considered speculative and the trading price of our common stock could decline due to any of these risks, and you may lose all or part of your investment. The following risk factors are not the only risk factors facing our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business.

We have not earned any revenues since our incorporation and only have a limited operating history in our current business of developing and commercializing stem cell production technology, which raise doubts about our ability to continue as a going concern.

We have a limited operating history in our current business of developing and commercializing stem cell production technology and must be considered in the development stage. We have not generated any revenues since our inception and we will, in all likelihood, continue to incur operating expenses without significant revenues until we successfully develop our stem cell production technology and commercialize our cell therapy products. Our primary source of funds has been the sale of our common stock. We cannot give assurances that we will be able to generate any significant revenues or income. These circumstances make us dependent on additional financial support until profitability is achieved. There is no assurance that we will ever be profitable or that we will be able to continue as a going concern as is noted in the notes to our consolidated financial statements for the year ended June 30, 2009.

Our independent registered public accounting firm s report states that there is a substantial doubt that we will be able to continue as a going concern.

Our independent registered public accounting firm, Kost, Forer, Gabbay & Kassierer a Member of Ernst & Young Global, state in their audit report attached to our audited consolidated financial statements for the fiscal years that ended June 30, 2009 and 2008 that since we are an exploration stage company, we have no established source of revenue, and are dependent on our ability to raise capital from shareholders and other sources to sustain operations, there is a substantial doubt that we will be able to continue as a going concern. There can be no assurance that acceptable financing to fund our ongoing operations can be obtained on suitable terms, if at all. If we are unable to obtain the financing necessary to support our operations, we may be unable to continue as a going concern. In that event, we may be forced to cease operations and our stockholders could lose their entire investment in our company.

Our likelihood of profitability depends on our ability to develop and commercialize products based on our stem cell production technology, which is currently in the development stage. If we are unable to complete the development and commercialization of our stem cell products successfully, our likelihood of profitability will be limited severely.

We are engaged in the business of developing cell therapy products. We have not realized a profit from our operations to date and there is little likelihood that we will realize any profits in the short or medium term. Any profitability in the future from our Company s business will be dependent upon successful commercialization of our potential cell therapy products, which will require significant additional research and development as well as substantial clinical trials.

If we are not able to successfully develop and commercialize our cell therapy product candidates and obtain the necessary regulatory approvals, we may not generate sufficient revenues to continue our business operations.

Our early stage cell therapy product candidates may fail to perform as we expect. Moreover even if our cell therapy product candidates will successfully perform as expected, in later stages of development may fail to show the desired safety and efficacy traits despite having progressed successfully through preclinical or initial clinical testing. We will need to devote significant additional research and development, financial resources and personnel to develop commercially viable products and obtain the necessary regulatory approvals.

If our cell therapy product candidates do not prove to be safe and efficacious in clinical trials, we will not obtain the required regulatory approvals. If we fail to obtain such approvals, we may not generate sufficient revenues to continue our business operations.

Even if we obtain regulatory approval of a product, that approval may be subject to limitations on the indicated uses for which it may be marketed. Even after granting regulatory approval, the FDA and regulatory agencies in other countries continue to review and inspect marketed products, manufacturers and manufacturing facilities, which may create additional regulatory burdens. Later discovery of previously unknown problems with a product, manufacturer or facility, may result in restrictions on the product or manufacturer, including a withdrawal of the product from the market. Further, regulatory agencies may establish additional regulations that could prevent or delay regulatory approval of our products.

We cannot market and sell our cell therapy product candidates in the United States or in other countries if we fail to obtain the necessary regulatory approvals or licensure.

We cannot sell our cell therapy product candidates until regulatory agencies grant marketing approval, or licensure. The process of obtaining regulatory approval is lengthy, expensive and uncertain. It is likely to take several years to obtain the required regulatory approvals for our cell therapy product candidates, or we may never gain the necessary approvals. Any difficulties that we encounter in obtaining regulatory approval may have a substantial adverse impact on our operations and cause our stock price to decline significantly.

To obtain marketing approvals in the United States for cell therapy product candidates we must, among other requirements, complete carefully controlled and well-designed clinical trials sufficient to demonstrate to the FDA that the cell therapy product candidates is safe and effective for each disease for which we seek approval. So far, we are at the beginning of conducting Phase I clinical trials for our PLX-PAD product, which is our only product that is the subject to clinical trials. Several factors could prevent completion or cause significant delay of these trials, including an inability to enroll the required number of patients or failure to demonstrate adequately that cell therapy product candidates are safe, effective and potent for use in humans. Negative or inconclusive results from or adverse medical events during a clinical trial could cause the clinical trial to be repeated or a program to be terminated, even if other studies or trials relating to the program are successful. The FDA can place a clinical trial on hold if, among other reasons, it finds that patients enrolled in the trial are or would be exposed to an unreasonable and significant risk of illness or injury. If safety concerns develop, we or the FDA could stop our trials before completion.

If we encounter problems or delays in the research and development of our potential cell therapy products, we may not be able to raise sufficient capital to finance our operation during the period required to resolve such problems or delays.

Our cell therapy products are currently in the development stage and we anticipate that we will continue to incur operating expenses without significant revenues until we have successfully completed all necessary research and clinical trials. We, and any of our potential collaborators, may encounter problems and delays relating to research and development, regulatory approval and intellectual property rights of our technology. Our research and development programs may not be successful, and our cell culture technology may not facilitate the production of cells outside the human body with the expected result. Our cell therapy products may not prove to be safe and efficacious in clinical trials. If any of these events occur, we may not have adequate resources to continue operations for the period required to resolve the issue delaying commercialization and we may not be able to raise capital to finance our continued operation during the period required for resolution of that issue. Accordingly, we may be forced to discontinue or suspend our operations.

If we are not able to conduct our clinical trials properly and on schedule, marketing approval by FDA and other regulatory authorities may be delayed or denied.

The completion of our clinical trials may be delayed or terminated for many reasons, including, but not limited to, if:

- the FDA does not grant permission to proceed and places the trial on clinical hold;
- subjects do not enroll in our trials at the rate we expect;
- subjects experience an unacceptable rate or severity of adverse side effects;
- third-party clinical investigators do not perform our clinical trials on our anticipated schedule or consistent with the clinical trial protocol, Good Clinical Practice and regulatory requirements, or other third parties do not perform data collection and analysis in a timely or accurate manner;
- inspections of clinical trial sites by the FDA or Institutional Review Boards (IRBs) of research institutions participating in our clinical trials find regulatory violations that require us to undertake corrective action, suspend or terminate one or more sites, or prohibit us from using some or all of the data in support of our marketing applications; or
- one or more IRBs suspends or terminates the trial at an investigational site, precludes enrollment of additional subjects, or withdraws its approval of the trial.

Our development costs will increase if we have material delays in our clinical trials, or if we are required to modify, suspend, terminate or repeat a clinical trial. If we are unable to conduct our clinical trials properly and on schedule, marketing approval may be delayed or denied by the FDA.

We may not be able to secure and maintain research institutions to conduct our clinical trials.

We rely on research institutions to conduct our clinical trials. Specifically, the limited number of centers experienced with cell therapy products candidates heightens our dependence on such research institutions. Our reliance upon research institutions, including hospitals and clinics, provides us with less control over the timing and cost of clinical trials and the ability to recruit subjects. If we are unable to reach agreement with suitable research institutions on acceptable terms, or if any resulting agreement is terminated, we may be unable to quickly replace the research institution with another qualified institution on acceptable terms. We may not be able to secure and maintain suitable research institutions to conduct our clinical trials.

We need to raise additional financing to support the research and development of our cell therapy products and our products in the future but we cannot be sure we will be able to obtain additional financing on terms favourable to us when needed. If we are unable to obtain additional financing to meet our needs, our operations may be adversely affected or terminated.

Our ability to continue to develop and commercialize our potential cell therapy products is dependent upon our ability to raise significant additional financing when needed. If we are unable to obtain such financing, we will not be able to fully develop our technology and commercialize our cell therapy products. Our future capital requirements will depend upon many factors, including:

- continued scientific progress in our research and development programs;
- costs and timing of conducting clinical trials and seeking regulatory approvals and patent prosecutions;
- competing technological and market developments;
- our ability to establish additional collaborative relationships; and
- the effect of commercialization activities and facility expansions if and as required.

We have limited financial resources and, to date, negative cash flow from operations. Although we anticipate that our existing capital resources will be adequate to satisfy our working capital and capital expenditure requirements until at least March 2010, we will need to raise additional funds in the near future in order to satisfy our working capital and capital expenditure requirements. Therefore, we are dependent on our ability to sell our common stock for funds, receive grants or to otherwise raise capital. There can be no assurance that we will be able to obtain financing on that basis in light of the market demand for our securities, the state of financial markets generally, and other relevant factors. Any sale of our common stock in the future will result in dilution to existing stockholders. Furthermore, there is no assurance that we will not incur debt in the future, that we will have sufficient funds to repay our future indebtedness, or that we will not default on our future debts, jeopardizing our business viability. Finally, we may not be able to borrow or raise additional capital in the future to meet our needs or to otherwise provide the capital necessary to conduct the development and commercialization of our potential cell therapy products, which could result in the loss of some or all of one s investment in our common stock.

We cannot guarantee continuation of government programs and tax benefits.

We have in the past received certain Israeli government approval under certain programs and may in the future utilize certain tax benefits in Israel by virtue of these programs. To remain eligible for such tax benefits, we must continue to meet certain conditions, including making some specified investments in fixed assets. If we fail to comply with these conditions in the future, the benefits we receive could be canceled and we may pay certain taxes. We cannot guarantee that these programs and tax benefits will be continued in the future, at their current levels or at all. If these programs and tax benefits are ended, our business, financial condition and results of operations could be negatively affected.

Because we received grants from the Israeli Office of the Chief Scientist, we are subject to ongoing restrictions.

We received royalty-bearing grants from the Israeli Office of the Chief Scientist of the Israeli Ministry of Industry, Trade and Labor, or the Chief Scientist, for research and development programs that meet specified criteria. The terms of the Chief Scientist s grants limit our ability to transfer know-how developed under an approved research and development program outside of Israel, regardless of whether the royalties were fully paid. Any non-Israeli citizen, resident or entity that, among other things, becomes a holder of 5% or more of our share capital or voting rights, is entitled to appoint one or more of our directors or our chief executive officer, serves as a director of our company or as our chief executive officer is generally required to notify the same to the Chief Scientist and to undertake to observe the law governing the grant programs of the Chief Scientist, the principal restrictions of which are the transferability limits described above.

We are exposed to fluctuations in currency exchange rates.

A significant portion of our business is conducted outside the United States. Therefore, we are exposed to currency exchange fluctuations in other currencies such as the Euro and the New Israeli Shekel (NIS). Moreover, a portion of our expenses in Israel and Europe are paid in NIS and Euros, respectively, which subjects us to the risks of foreign currency fluctuations. Our primary expenses paid in NIS are employee salaries, fees for consultants and subcontractors and lease payments on our Israeli facilities.

The dollar cost of our operations in Israel will increase to the extent increases in the rate of inflation in Israel are not offset by a devaluation of the NIS in relation to the dollar, which would harm our results of operations.

Since a considerable portion of our expenses such as employees salaries are linked to an extent to the rate of inflation in Israel, the dollar cost of our operations is influenced by the extent to which any increase in the rate of inflation in Israel is or is not offset by the devaluation of the NIS in relation to the dollar. As a result, we are exposed to the risk that the NIS, after adjustment for inflation in Israel, will appreciate in relation to the dollar. In that event, the dollar cost of our operations in Israel will increase and our dollar-measured results of operations will be adversely affected. During the past few years inflation-adjusted NIS appreciated against the dollar, which raised the dollar cost of our Israeli operations. We cannot predict whether the NIS will appreciate against the dollar or vice versa in the future. Any increase in the rate of inflation in Israel, unless the increase is offset on a timely basis by a devaluation of the NIS in relation to the dollar, will increase labor and other costs, which will increase the dollar cost of our operations in Israel and harm our results of operations.

If we fail to obtain and maintain required regulatory approvals for our potential cell therapy products, our ability to commercialize our potential cell therapy products will be limited severely.

Once our potential cell therapy products are fully developed, we intend to market our potential cell therapy products primarily in the United States and Europe. We must obtain FDA approval of our technology and potential cell therapy products before commercialization of our potential cell therapy products may commence in the United States and similar agencies in Europe. We may also be required to obtain additional approvals from foreign regulatory authorities to commence our marketing activities in those jurisdictions. If we cannot demonstrate the safety, reliability and efficacy of our cells, including long-term sustained cell engraftment, or if one or more patients die or suffer severe complications in clinical trials, the FDA and/or other regulatory authorities could delay or withhold regulatory approval of our technology and potential products.

Furthermore, even if we obtain regulatory approval for our cell therapy products, that approval may be subject to limitations on the indicated uses for which they may be marketed. Even after granting regulatory approval, the FDA, other regulatory agencies, and governments in other countries will continue to review and inspect marketed products, manufacturers and manufacturing facilities. Later discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions on the product or manufacturer, including a withdrawal of the product from the market. Further, governmental regulatory agencies may establish additional regulations, which could prevent or delay regulatory approval of our technology and our potential cell therapy products.

We have very limited experience in conducting and managing human trials. If we fail in the conducting of such trials, our business will be materially harmed.

Even though we have recruited in the past year employees who are experienced in managing and conducting clinical trials, we still have very limited experience in this area. We will need to expand on our experience in order to obtain regulatory approvals for our therapeutic product candidates. The failure to successfully conduct clinical trials could materially harm our business.

The trend towards consolidation in the pharmaceutical and biotechnology industries may adversely affect us.

There is a trend towards consolidation in the pharmaceutical and biotechnology industries. This consolidation trend may result in the remaining companies having greater financial resources and discovery technological capabilities, thus intensifying competition in these industries. This trend may also result in fewer potential collaborators or licensees for our therapeutic product candidates. Also, if a consolidating company is already doing business with our competitors, we may lose existing licensees or collaborators as a result of such consolidation.

This trend may adversely affect our ability to enter into agreements for the development and commercialization of our product candidates, and as a result may harm our business.

Our product development programs are based on novel technologies and are inherently risky.

We are subject to the risks of failure inherent in the development of products based on new technologies. The novel nature of our therapeutics creates significant challenges in regards to product development and optimization, manufacturing, government regulation, third-party reimbursement and market acceptance. For example, the FDA has relatively limited experience with stem cell therapies. None has been approved by the FDA for commercial sale, and the pathway to regulatory approval for our cell therapy product candidates may accordingly be more complex and lengthy. As a result, the development and commercialization pathway for our therapies may be subject to increased uncertainty, as compared to the pathway for new conventional drugs.

There are no FDA approved treatments for some of the disease indications we are pursuing. This could complicate and delay FDA approval of our biologic drug candidates.

There are no drugs or therapies currently approved with for treatment of PAD using allogeneic cell therapy products. As a result, the clinical efficacy endpoints, or the criteria to measure the intended results of treatment may be difficult to determine. In addition, patients battling PAD and who, therefore, are candidates for treatment with PLX-PAD, are typically suffer from complications and disorders that may bring to amputation and other complications prior to the completion of the study. This resulting reduction in the number of patients available for evaluation at the end of the study may make it more difficult for us to demonstrate efficacy, as necessary to obtain FDA approval to market our products.

Our cell therapy drug candidates represent new classes of therapy that the marketplace may not understand or accept.

Even if we successfully develop and obtain regulatory approval for our biologic drug candidates, the market may not understand or accept them. We are developing cell therapy product candidates that represent novel treatments and will compete with a number of more conventional products and therapies manufactured and marketed by others, including major pharmaceutical companies. The degree of market acceptance of any of our developed and potential products will depend on a number of factors, including:

- the clinical safety and effectiveness of our cell therapy drug candidates and their perceived advantage over alternative treatment methods;
- adverse events involving our cell therapy product candidates or the products or product candidates of others that are stem cell based; and
- the cost of our products and the reimbursement policies of government and third-party payors.

If the health care community does not accept our potential products for any of the foregoing reasons, or for any other reason, it could affect our sales, having a material adverse effect on our business, financial condition and results of operations.

We are dependent upon third-party suppliers for raw materials needed for the manufacture; if any of these third parties fail or are unable to perform in a timely manner, our ability to manufacture and deliver will be compromised.

In order to produce our call therapy product candidates, we require certain raw of materials in addition to the placenta used in our manufacturing process. These items must be manufactured and supplied to us in sufficient quantities and in compliance with GMP. To meet these requirements, we have entered into supply agreements with firms that manufacture these components to GMP standards. Our requirements for these items are expected to increase if and when we transition to the manufacture of commercial quantities of our biologic drug candidates.

In addition, as we proceed with our clinical trial efforts, we must be able to continuously demonstrate to the FDA and the EMEA, that we can manufacture our cell therapy product candidates with consistent characteristics. Accordingly, we are materially dependent on these suppliers for supply of GMP-grade components of consistent quality. Our ability to complete ongoing clinical trials may be negatively affected in the event that we are forced to seek and validate a replacement source for any of these critical components.

If our processing and storage facility or our clinical manufacturing facilities are damaged or destroyed, our business and prospects would be negatively affected.

If our processing and storage facility or the equipment in the facility were to be significantly damaged or destroyed, we could suffer a loss of some or all of the stored units of our cell therapy drug candidates and it would force us to delay our clinical trial processes. We have a clinical manufacturing facility located in Haifa, Israel. If this facility or the equipment in it is significantly damaged or destroyed, we may not be able to quickly or inexpensively replace our manufacturing capacity.

Even if we obtain regulatory approvals to commercialize our cell therapy products, we may encounter a lack of commercial acceptance of our cell therapy products, which would impair the profitability of our business.

Our research and development efforts are primarily directed toward obtaining regulatory approval for our potential cell therapy products. Current methods of stem cell collection and use have been widely practiced for a number of years, and our technology and products may not be accepted by the marketplace as readily as these or other competing processes and methodologies. Additionally, our products may not be employed in all potential applications being investigated, and any reduction in applications would limit the market acceptance of our technology and our potential revenues. As a result, even if we obtain all required regulatory approvals, we cannot be certain that our potential cell therapy products will be adopted at a level that would allow us to operate profitably.

If we do not keep pace with our competitors and with technological and market changes, our technology and products may become obsolete and our business may suffer.

The cellular therapeutics industry, of which we are a part, is very competitive and is subject to technological changes that can be rapid and intense. We have faced, and will continue to face, intense competition from biotechnology, pharmaceutical and biopharmaceutical companies, academic and research institutions and governmental agencies engaged in cellular therapeutic and drug discovery activities or funding, both in the United States and internationally. Some of these competitors are pursuing the development of cellular therapeutics, drugs and other therapies that target the same diseases and conditions that we target in our clinical and preclinical programs.

Many of our competitors have significantly greater resources, more product candidates and have developed product candidates and processes that directly compete with our products. Our competitors may have developed, or could develop in the future, new products that compete with our products or even render our products obsolete.

We depend to a significant extent on certain key personnel, the loss of any of whom may materially and adversely affect our company.

Our success depends on a significant extent to the continued services of certain highly qualified scientific and management personnel, in particular, Zami Aberman, our Chief Executive Officer, and Yaky Yanay, our Chief Financial Officer. We face competition for qualified personnel from numerous industry sources, and there can be no assurance that we will be able to attract and retain qualified personnel on acceptable terms. The loss of service of any of our key personnel could have a material adverse effect on our operations or financial condition. In the event of the loss of services of such personnel, no assurance can be given that we will be able to obtain the services of adequate replacement personnel. We do not maintain key person insurance on the lives of any of our officers or employees.

The patent approval process is complex and we cannot be sure that our pending patent applications or future patent applications will be approved.

The patent approval process is complex and results are therefore highly uncertain. No assurance can be given that any of our pending patent applications or future patent applications will be approved, that the scope of any patent protection granted will exclude competitors or provide us with competitive advantages, that any of the patents that have been or may be issued to us will be held valid if subsequently challenged, or that other parties will not claim rights to or ownership of our patents or other proprietary rights that we hold. Furthermore, there can be no assurance that others have not developed or will not develop similar products, duplicate any of our technology or products or design around any patents that have been or may be issued to us or any future licensors. Since patent applications in the United States are not publicly disclosed until patents are issued, there can be no assurance that others did not first file applications for products covered by our pending patent applications, nor can we be certain that we will not infringe any patents that may be issued to others pursuant to such applications.

Our success depends in large part on our ability to develop and protect our technology and our cell therapy products. If our patents and proprietary rights agreements do not provide sufficient protection for our technology and our cell therapy products, our business and competitive position will suffer.

Our success will also depend in part on our ability to develop our technology and commercialize cell therapy products without infringing the proprietary rights of others. We have not conducted freedom of use patent searches and no assurance can be given that patents do not exist or could not be filed which would have an adverse affect on our ability to develop our technology or maintain our competitive position with respect to our potential cell therapy products. If our technology components, devices, designs, products, processes or other subject matter are claimed under other existing United States or foreign patents or are otherwise protected by third party proprietary rights, we may be subject to infringement actions. In such event, we may challenge the validity of such patents or other proprietary rights or we may be required to obtain licenses from such companies in order to develop, manufacture or market our technology or products. There can be no assurances that we would be able to obtain such licenses or that such licenses, if available, could be obtained on commercially reasonable terms. Furthermore, the failure to either develop a commercially viable alternative or obtain such licenses could result in delays in marketing our proposed products or the inability to proceed with the development, manufacture or sale of products requiring such licenses, which could have a material adverse affect on our business, financial condition and results of operations. If we are required to defend ourselves against charges of patent infringement or to protect our proprietary rights against third parties, substantial costs will be incurred regardless of whether we are successful. Such proceedings are typically protracted with no certainty of success. An adverse outcome could subject us to significant liabilities to third parties and force us to curtail or cease our development of our technology and the commercialization our potential cell therapy products.

We must further protect and develop our technology and products in order to become a profitable company.

The initial patent underlying our technology will expire in approximately 2020. If we do not complete the development of our technology and products in development by then, or to create additional sufficient layers of patents, other companies may use the technology to develop competing products. If this happens, we would likely lose our competitive position and our business would likely suffer.

Furthermore, the scope of our patents may not be sufficiently broad to offer meaningful protection. In addition, our patents could be successfully challenged, invalidated or circumvented so that our patent rights would not create an effective competitive barrier. We also intend to seek patent protection for any of our potential cell therapy products once we have completed their development.

We also rely on trade secrets and unpatentable know-how that we seek to protect, in part, by confidentiality agreements with our employees, consultants, suppliers and licensees. These agreements may be breached, and we might not have adequate remedies for any breach. If this were to occur, our business and competitive position would suffer.

Potential product liability claims could adversely affect our future earnings and financial condition.

We face an inherent business risk of exposure to product liability claims in the event that the use of our products results in adverse affects. As a result, we may incur significant product liability exposure. We may not be able to maintain adequate levels of insurance at reasonable cost and/or reasonable terms. Excessive insurance costs or uninsured claims would add to our future operating expenses and adversely affect our financial condition.

Our principal research and development facilities are located in Israel and the unstable military and political conditions of Israel may cause interruption or suspension of our business operations without warning.

Our principal research and development facilities are located in Israel. As a result, we are directly influenced by the political, economic and military conditions affecting Israel. Since the establishment of the State of Israel in 1948, a number of armed conflicts have taken place between Israel and its Arab neighbors. Acts of random terrorism periodically occur which could affect our operations or personnel.

In addition, Israeli-based companies and companies doing business with Israel, have been the subject of an economic boycott by members of the Arab League and certain other predominantly Muslim countries since Israel s establishment. Although Israel has entered into various agreements with certain Arab countries and the Palestinian Authority, and various declarations have been signed in connection with efforts to resolve some of the economic and political problems in the Middle East, we cannot predict whether or in what manner these problems will be resolved. Wars and acts of terrorism have resulted in significant damage to the Israeli economy, including reducing the level of foreign and local investment.

Furthermore, certain of our officers and employees may be obligated to perform annual reserve duty in the Israel Defense Forces and are subject to being called up for active military duty at any time. All Israeli male citizens who have served in the army are subject to an obligation to perform reserve duty until they are between 42 and 54 years old, depending upon the nature of their military service.

Although our internal control over financial reporting was considered effective as of June 30, 2009, there is no assurance that our internal control over financial reporting will continue to be effective in the future, which could result in our financial statements being unreliable, government investigation or loss of investor confidence in our financial reports.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we are required to furnish an annual report by our management assessing the effectiveness of our internal control over financial reporting. This assessment must include disclosure of any material weaknesses in our internal control over financial reporting identified by management. Management s report as of the end of fiscal year 2009 concluded that our internal control over financial reporting was effective. There is however, no assurance that we will be able to maintain such effective internal control over financial reporting in the future. Ineffective internal control over financial reporting can result in errors or other problems in our financial statements. In addition, our internal control over financial reporting has not yet been audited by our independent registered public accounting firm. In the future, if we are unable to assert that our internal controls are effective, our investors could lose confidence in the accuracy and completeness of our financial reports, which in turn could cause our stock price to decline. Failure to maintain effective internal control over financial reporting could also result in investigation or sanctions by regulatory authorities.

Because some of our officers and directors are located in non-U.S. jurisdictions, you may have no effective recourse against the management for misconduct and may not be able to enforce judgment and civil liabilities against our officers, directors, experts and agents.

Most of our directors and officers are nationals and/or residents of countries other than the United States, and all or a substantial portion of their assets are located outside the United States. As a result, it may be difficult for you to enforce within the United States any judgments obtained against our officers or directors, including judgments predicated upon the civil liability provisions of the securities laws of the United States or any U.S. state.

Because we do not intend to pay any dividends on our common stock, investors seeking dividend income should not purchase shares of our common stock.

We have not declared or paid any dividends on our common stock since our inception, and we do not anticipate paying any such dividends for the foreseeable future. Investors seeking dividend income should not invest in our common stock.

We have a potential conflict with a prior financing agreement that may expose us to potential litigation

In our subscription agreement for our May 2007 equity financing, or the Prior Financing Agreement, there is a provision that requires us for a period of four years (subject to acceleration under certain circumstances) not to sell any of our common stock for less than $.0125 per share. The Prior Financing Agreement provides that any sale below that number must be preceded by a consent from each purchaser in the placement. Since that date, we have effected a one-for-200 reverse stock split.

In August, 2008, we entered into securities purchase agreements pursuant to which we sold securities at a price higher than the pre-split price of $0.125 and below the post-split price of $2.50. We decided to proceed with this offering notwithstanding this provision for the following reasons:

- The agreement did not contain any provisions for the adjustment of the specified minimum price in the event of stock splits and the like. If such agreement were to have contained such a provision, the floor price would be $2.50, which is more than the offering price of this offering.
- The majority of purchasers in the private placement have sold the stock purchased in the placement, and thus the number of purchasers whose consent is purportedly required has been substantially reduced. The number of shares outstanding as to which this provision currently applies according the information supplied by our transfer agent is 1,848,545 shares.
- An agreement that prevents our Board of Directors from issuing shares that are necessary to finance our business may be unenforceable.
- Even if the agreement were considered enforceable and the share price number were to be adjusted for our reverse stock split, we believe that there would be no damage from this offering to the holders of our shares whose consent is purportedly required.

In the event that a court were to hold that the issuance of shares below $2.50 per share would violate the Prior Financing Agreement, it is unclear what remedy the court might impose. If the court were to impose a remedy that would be the equivalent of an anti-dilution provision (which is not contained in the Prior Financing Agreement), any issuance of shares would be dilutive to our shareholders, including those who purchase shares in the current offering. In addition, since August 2008, we, on several occasions, raised funds at a price per share which is higher than the pre-split price of $0.125 and below the post-split price of $2.50.

In connection with the August, 2008 financing, we approved the issuance of warrants to purchase up to 147,884 shares of our common stock to each of the investors who was a party to the Prior Financing Agreement that held shares purchased pursuant to such agreement, as of August, 2008, conditioned on having the investors execute a general release pursuant to which we will be released from liability including, but not limited to, any claims, demands, or causes of action arising out of, relating to, or regarding sales of certain equity securities notwithstanding the above mentioned provision. As of September 10, 2009 we received a general release from some of the investors, and issued them warrants to purchase 70,368 shares of our common stock

Item 1B. Unresolved Staff Comments.

Not Applicable.

Item 2. Properties.

Our principal offices are located at MATAM Advanced Technology Park, Building No. 20, Haifa, Israel 31905, where we occupy approximately 13,800 square feet. We lease our facilities. Our monthly rental as of September 2009 is 69,000 NIS (approximately $18,000). For the fiscal year ended June 30, 2009, we paid $220,866 for rent. We believe that the space available in our facilities is adequate to meet our current needs, although future growth may require that we occupy additional space.

Item 3. Legal Proceedings.

None.

Item 4. Submissions of Matters to a Vote of Security Holders.

None.

PART II

Item 5. Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

On December 19, 2002, our shares of common stock received approval for quotation on the National Association of Securities Dealers Inc. s (now the Financial Regulatory Authority) Over-the-Counter Bulletin Board. On May 7, 2007, our shares also began trading on Europe s Frankfurt Stock Exchange, under the symbol PJT. On November 26, 2007, we effected a two hundred for one reverse stock split. On December 10, 2007, our shares began trading on the NASDAQ Capital Market under the symbol PSTI.

The following table reflects the high and low bid information for our common stock on the OTC Bulletin Board and high and low sale prices on the NASDAQ Capital Market obtained from Yahoo! Finance and reflects inter-dealer prices, without retail mark-up, markdown or commission, and may not necessarily represent actual transactions. All numbers are adjusted for our two hundred for one reverse stock split.

The high and low bid and sale prices of our common stock for the periods indicated below are as follows:

OTC Bulletin Board

Quarter Ended	High	Low
September 30, 2007	$7.8	$7.2

NASDAQ

Quarter Ended	High	Low
December 31, 2007	$4.15	$3.51
March 31, 2008	$1.95	$1.61
June 30, 2008	$1.32	$1.20
September 30, 2008	$0.89	$0.82
December 31, 2008	$0.44	$0.38
March 31, 2009	$1.39	$1.28
June 30, 2009	$1.41	$1.29

On September 10, 2009, the per share closing price of our common stock, as reported by Yahoo! Finance, was $1.44. As of September 10, 2009, there were 110 holders of record of our common stock. As of such date, 15,796,181 common shares were issued and outstanding.

American Stock Transfer and Trust Company, LLC is the registrar and transfer agent for our common shares. Their address is 6201 15th Avenue, 2nd Floor, Brooklyn, NY 11219, telephone: (718) 921-8261, (800) 937-5449.

Dividend Policy

We have not paid any cash dividends on our common stock and have no present intention of doing so. Our current policy is to retain earnings, if any, for use in our operations and in the development of our business. Our future dividend policy will be determined from time to time by our Board of Directors.

Recent Sales of Unregistered Securities

In April 2009, we issued 3,500 shares to a consultant in consideration for services he provided to our company.

In April 2009, we granted 100,000 options exercisable at a price of $1.34 per share to a consultant in consideration for services he provided to our company. The options vest in twelve equal monthly installments of 8,333 shares.

In May 2009, we issued 164,307 shares of common stock to our employees, directors and consultants. The shares were issued in exchange for a one year voluntary reduction in the cash compensation they were entitled to receive in consideration for their services.

In May and June 2009, we issued 5,644 shares of common stock to a media relations consultant in consideration for services he provided to our company.

These issuances were deemed exempt under Regulation S, Regulation D and/or Section 4(2) of the Securities Act of 1933, as amended.

Item 6. Selected financial data.

Not Applicable.

Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations.

Overview:

We develop and intend to commercialize, cell therapy production technologies and products.

On December 10, 2007, our shares of common stock began trading on the NASDAQ Capital Market under the symbol PSTI. The shares were previously traded on the OTC Bulletin Board under the trading symbol PLRS.OB . On May 7, 2007, our shares also began trading on the Frankfurt Stock Exchange, under the symbol PJT.

Effective on July 1, 2008, we amended our Articles of Incorporation to authorize 10,000,000 shares of Preferred Stock, par value $0.00001, with such series, rights, preferences, privileges and restrictions as may be designated from time to time by the Board of Directors.

RESULTS OF OPERATIONS YEAR ENDED JUNE 30, 2009 COMPARED TO YEAR ENDED JUNE 30, 2008.

We have not generated any revenues, and we have negative cash flow from operations of $17,730,000 and have accumulated a deficit of $32,652,000 since our inception in May 2001. This negative cash flow is mostly attributable to research and development and general and administrative expenses. We anticipate that our operating expenses will increase as we intend to conduct expanded development of our products through animal pre-clinical trials and experiments and clinical trials. We estimate our cash expenses in the next twelve months will be approximately $6,000,000, generally falling in two major categories: research and development costs and general and administrative expenses.

Research and Development net

Research and development net costs, for the year ended June 30, 2009 decreased by 28% to $3,141,000 from $4,393,000 for the year ended June 30, 2008. The decrease is due to the decrease in stock-based compensation to employees and consultants in the amount of $1,036,000 as a result of a decrease in our stock price, and due to an increase in the participation by the Israeli Office of the Chief Scientist, or OCS, which offset costs, as the grant for the last 4 months of fiscal year 2008 was approved and recorded in fiscal year 2009. This decrease is partially offset by increasing expenses of subcontractors and materials as we are progressing with our research and development toward clinical trials.

For the next twelve months, we estimate that our cash research and development net costs will be approximately $4,000,000. We intend to spend our research and development funds on continuing research of our PLX cells, continuing our Phase I clinical trials for the PAD indication in the United States and Germany, upgrading the 3-D bioreactor operations, developing the expansion of our placenta adherent stem cell product, and developing capabilities for new clinical indications of PLX cells.

General and Administrative

General and administrative expenses for the year ended June 30, 2009 decreased by 43% to $3,417,000 from $6,036,000 for the year ended June 30, 2008. The decrease in general and administrative expenses is primarily attributable to the decrease in stock-based compensation to employees and consultants in the amount of $1,865,000. In addition, we reduced various expenses, mainly expenses related to services provided by investor relations and public relations consultants.

For the next twelve months, we estimate that our cash general and administrative expenses will be approximately $2,000,000. These expenses will include management services, public relations and investor relations and additional amounts on office and miscellaneous charges, which consist primarily of charges incurred for purchase of office supplies and other administrative expenses. These expenses will also include professional fees, which consist primarily of accounting and auditing fees for the year-end audit and legal fees for securities advice, directors liability insurance and cost of fundraising.

Net Loss

Net loss for the year ended June 30, 2009 was $6,636,000 as compared to net loss of $10,498,000 for the year ended June 30, 2008. Net loss per share for the year ended June 30, 2009 was $0.63, as compared to $1.63 for the year ended June 30, 2008. The net loss per share decreased as a result of the decrease in the net loss and the increase in our weighted average number of shares due to the issuance of additional shares pursuant to equity issuances since July 1, 2008 as discussed further below.

Liquidity and Capital Resources

As of June 30, 2009, total current assets were $2,935,000 and total current liabilities were $840,000. On June 30, 2009, we had a working capital surplus of $2,095,000 and an accumulated deficit of $32,652,000. We finance our operations and plan to continue doing so with stock issuances and with the participation of the OCS.

Cash and cash equivalents as of June 30, 2009 amounted to $2,339,000. This is an increase of $2,016,000 from the $323,000 reported as of June 30, 2008. In addition to the cash and cash equivalents, we had marketable securities in the amount of $1,185,000 as of June 30, 2008. Cash balances increased in the year ended June 30, 2009 for the reasons presented below:

Operating activities used cash of $4,262,000 in the year ended June 30, 2009. Cash used by operating activities in the year ended June 30, 2009 primarily consisted of payments of salaries to our employees, and payments of fees to our consultants, subcontractors and professional services providers, less research and development grant participation by the OCS.

Investing activities provided cash of $830,000 in the year ended June 30, 2009. This resulted primarily from proceeds from sale of marketable securities in the amount of $1,113,000 offset by purchases of capital equipment and leasehold improvements associated with our GMP in the amount of $313,000.

Financing activities generated cash in the amount of $5,448,000 during the year ended June 30, 2009 resulting primarily from receiving cash from investors related to the offerings described below.

On August 6, 2008, we sold 1,391,304 shares of our common stock and warrants to purchase 695,652 shares of common stock at an exercise price of $1.90 per share to two investors in consideration of $1,600,000 pursuant to the terms of a securities purchase agreement. Rodman & Renshaw, LLC acted as placement agent, on a best efforts basis, for the offering and received a placement fee equal to 6% of the gross purchase price of the securities sold (excluding any consideration that may be paid in the future upon exercise of the warrants) as well as warrants to purchase 83,478 shares of common stock at an exercise price of $1.44 per share. Subject to Financial Industry Regulatory Authority, or FINRA, Rule 2710, the placement agent warrants may be exercised after six months through and including August 5, 2013. The offering was made pursuant to our effective shelf registration statement on Form S-3 (File No. 333-151761).

On September 22, 2008, we sold 900,000 shares of our common stock and warrants to purchase 675,000 shares of common stock to an investor in consideration for $1,035,000 pursuant to terms of a securities purchase agreement. The price per share of common stock was $1.15, and the exercise price of the warrants is $1.90. The warrants will be exercisable for a period of five years. The offering was made pursuant to our effective shelf registration statement on Form S-3 (File No. 333-151761). As part of this transaction, we paid a transaction fee to finders equal to 6% of the actual purchase price and issued, for no further consideration, warrants exercisable for five years at an exercise price of $1.50 per share to purchase 54,000 shares of our common stock.

During November 2008 through January 2009, we entered into securities purchase agreements with various investors, pursuant to which we sold in aggregate of 1,746,575 shares of our common stock at a price of $0.40 per share, for an aggregate purchase price of $698,630, and issued warrants to purchase up to an additional 1,746,575 shares of common stock with an exercise price of $1.00 per share. The warrants became exercisable after six months from the applicable closing date and will expire after five years from such date. Pursuant to the securities purchase agreements, the investors had the option, by notice to us no later than 10 business days following the release of an official announcement by us that the company is initiating its first human clinical trials, to purchase an additional 931,507 shares of common stock at a purchase price of $0.75 per share, for an aggregate purchase price of $698,630, and receive therewith warrants to purchase up to additional 931,507 shares of common stock with an exercise price of $1.50 per share, or the Initial Option. The Initial Option was exercisable within six months from the applicable closing date. Investors exercised the Initial Option in July 2009 as described further below. As part of this transaction, we paid a transaction fee to finders in an amount of $38,630 in cash and issued them warrants exercisable for five years at an exercise price of $1.00 per share to purchase 96,579 shares of our common stock.

On January 20, 2009, we sold 216,818 shares of our common stock and warrants to purchase 216,818 shares of common stock to investors in consideration for $95,400 pursuant to terms of a securities purchase agreement. The price per share of common stock was $0.44, and the exercise price of the warrants is $1.00 per share. The warrants became exercisable after six months from the closing date and will expire after five years from such date. Pursuant to the agreement, the investors had the option, by notice to us no later than 10 business days following the release of an official announcement by us that the company is initiating its first human clinical trials, to purchase additional 127,200 shares of common stock at a purchase price of $0.75 per share, for an aggregate purchase price of $95,400, and receive therewith warrants to purchase up to an additional 127,200 shares of common stock with an exercise price of $1.50 per share, or the January 20 Option. The January 20 Option was exercisable within six months from the closing date. Investors exercised the January 20 Option in July 2009 as described further below. As part of this transaction, we paid a transaction fee to finders in an amount of $5,400 in cash and issued them warrants exercisable for two years at an exercise price of $1.00 per share to purchase 12,273 shares of our common stock.

On January 29, 2009, we entered into a subscription agreement with certain investors, pursuant to which we sold to such investors 969,826 units, each unit consisting of one share of common stock and a warrant to purchase one share of our common stock exercisable 181 days following the issuance thereof for a period of five years thereafter at an exercise price of $1.90 per share, or the Units. The purchase price per Unit was $1.16 and the aggregate purchase price for such Units was $1,125,000. As part of this transaction, we paid a transaction fee to finders in an amount of $89,546 in cash and issued these investors warrants to purchase 80,983 shares of our common stock, exercisable after six months for five years at an exercise price of $1.90 per share.

On May 5, 2009, we entered into securities purchase agreements with two investors pursuant to which we sold 888,406 shares of our common stock and warrants to purchase 488,623 shares of common stock in consideration for $1,332,610. The exercise price of the warrants is $1.96 and they will be exercisable for a period of five years commencing six months following the issuance thereof. Rodman & Renshaw, LLC acted as placement agent, on a best efforts basis, for the offering and received a placement fee equal to 6% of the gross purchase price of the securities sold (excluding any consideration that may be paid in the future upon exercise of the warrants) as well as warrants to purchase 53,304 shares of common stock at an exercise price of $1.875 per share. Subject to FINRA Rule 2710, the placement agent s warrants may be exercised after six months through and including May 5, 2014. The offering was made pursuant to our effective shelf registration statement on Form S-3 (File No. 333-151761).

We announced that the company is initiating its first human clinical trials, which triggered the ability to exercise the Initial Option and the January 20 Option by certain investors. Accordingly, we issued in July 2009 1,058,708 shares of common stock at a purchase price of $0.75 per share, for an aggregate purchase price of $794,030, and warrants to purchase up to an additional 1,058,708 shares of common stock with an exercise price of $1.50 per share.

We received $1,375,000 from grants from the OCS during the year ended June 30, 2009. Recently, a grant in an amount of $2.3 million was approved for participation in R&D expenses for the period March 2009 to February 2010 (In August 2009 we received $668,000 on account of the approved grant).

While most of our capital resources are denominated by US dollars, about half of our expenses are denominated by NIS. Over the past year, due to the increased volatility of the US Dollar, we began using foreign currency forward contracts. We continue to actively utilize currency hedging transactions to manage our exposure.

Outlook

We do not expect to generate any revenues from sales of products in the next twelve months. We may generate revenues from sale of licenses to use our technology or products. Our products will likely not be ready for sale for at least three years, if at all.

The OCS has supported our activity in the past three years. Our application for a fourth year s grant was submitted in March 2009. Recently, the OCS approved a grant in an amount of $2.3 million for participation in R&D expenses for the period March 2009 to February 2010. We believe that the funds we have, together with the approved R&D grant, will be sufficient for operating until March 2010. Our independent registered public accounting firm s report states that there is a substantial doubt that we will be able to continue as a going concern. Management believes that we will need to raise additional funds before we have any cash flow from operations.

We are looking constantly for sources of funding, including non-diluting funds, such as the OCS grants and filing grant applications with the U.S. National Institutes of Health, which we have done recently. There can be no assurance that we will receive this grant. In addition, we plan to raise additional funds by issuance of equity.

If we are unable to obtain the financing necessary to support our operations, we may need to take measures to reduce our operating costs, or, if such measures will not be sufficient, we may be unable to continue as a going concern. In that event, we may be forced to cease operations and our stockholders could lose their entire investment in the company.

Application of Critical Accounting Policies

Our financial statements and accompanying notes are prepared in accordance with U.S. GAAP. Preparing financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. These estimates and assumptions are affected by management s application of accounting policies. We believe that understanding the basis and nature of the estimates and assumptions involved with the following aspects of our consolidated financial statements is critical to an understanding of our financials.

Stock-based compensation

We account for stock-based compensation in accordance with Statement of Financial Accounting Standards, or SFAS, No. 123 (revised 2004), Share-Based Payment , or SFAS No. 123(R). SFAS No. 123(R) requires companies to estimate the fair value of equity-based payment awards on the date of grant using an option-pricing model. The value of the portion of the award that is ultimately expected to vest is recognized as an expense over the requisite service periods in our consolidated income statements.

We recognize compensation expenses for the value of its awards, which have graded vesting based on the accelerated method over the requisite service period of each of the awards.

We estimate the fair value of stock options granted using the Black-Scholes-Merton option-pricing model. The option-pricing model requires a number of assumptions, of which the most significant are, expected stock price volatility, and the expected option term. Expected volatility was calculated based upon actual historical stock price movements over the most recent periods ending on the grant date. The expected life of options granted is calculated using the Simplified Method, as defined in Staff Accounting Bulletin, or SAB No. 107, Share-Based Payments , or SAB No. 107, as the average between the vesting period and the contractual life of the options. On December 21, 2007 the SEC staff issued SAB No. 110, or SAB 110, which, effective January 1, 2008, amends and replaces SAB No. 107.

We currently use the Simplified Method, as adequate historical experience is not available to provide a reasonable estimate. We adopted SAB 110 effective January 1, 2008 and will continue to apply the Simplified Method until enough historical experience is available to provide a reasonable estimate of the expected term for stock option grants.

We have historically not paid dividends and has no foreseeable plans to issue dividends. The risk-free interest rate is based on the yield from U.S. Treasury zero-coupon bonds with an equivalent term. The expected annual pre-vesting forfeiture rate affects the number of exercisable options. Based on our historical experience, the annual pre-vesting forfeiture rate is 5%.

The assumptions below are relevant to restricted shares granted in 2009:

In accordance with SFAS No. 123(R), restricted shares are measured at their fair value as if they were vested and issued on the grant date. All restricted shares to employees and non-employees granted in 2009 were granted for no consideration; therefore their fair value was equal to the share price at the date of grant.

The fair value of all restricted shares was determined based on the close trading price of our shares known at the grant date.

We apply SFAS No. 123 (R) and Emerging Issues Task Force No. 96-18, Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services , with respect to options and warrants issued to non-employees. SFAS 123(R) requires the use of option valuation models to measure the fair value of the options and warrants at the measurement date.

Off Balance Sheet Arrangements

Our company has no off balance sheet arrangements.

Item7A. Quantitative and Qualitative Disclosures About Market Risk.

Not Applicable.

Item 8. Financial Statements and Supplementary Data.

Our financial statements are stated in thousands United States dollars (US$) and are prepared in accordance with U.S. GAAP.

The following audited consolidated financial statements are filed as part of this registration statement:

Report of Independent Registered Public Accounting Firm, dated September 23, 2009

Consolidated Balance Sheets

Consolidated Statements of Operations

Consolidated Statements of Changes in Stockholders Equity (Deficiency)

Consolidated Statements of Cash Flows

Notes to the Consolidated Financial Statements

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

CONSOLIDATED FINANCIAL STATEMENTS

As of June 30, 2009

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)
CONSOLIDATED FINANCIAL STATEMENTS

As of June 30, 2009

U.S. DOLLARS IN THOUSANDS

INDEX

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To The Stockholders Of

PLURISTEM THERAPEUTICS INC.

(A Development Stage Company)

We have audited the accompanying consolidated balance sheets of Pluristem Therapeutics Inc. and its subsidiary (a development stage company) (the Company) as of June 30, 2009 and the related consolidated statements of operations, changes in stockholders equity and cash flows for each of the three years in the period ended June 30, 2009 and for the period from May 11, 2001 (inception date) through June 30, 2009. These consolidated 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. We were not engaged to perform an audit of the Company s internal control over financial reporting. Our audits 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 also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management and 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 consolidated financial position of the Company as of June 30, 2009, and the consolidated results of operations and cash flows for each of the three years in the period ended June 30, 2009 and for the period from May 11, 2001 (inception date) through June 30, 2009, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 1b to the consolidated financial statements, the Company has not yet generated revenues from its operations and is dependent on external sources for financing its operations. These factors, among others discussed in Note 1b, raise substantial doubt about the Company s ability to continue as a going concern. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets amounts or the amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

/s/ Kost Forer Gabbay & Kasierer

Kost Forer Gabbay & Kasierer
A member of Ernst & Young Global

Haifa, Israel
September 23, 2009

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

CONSOLIDATED BALANCE SHEETS

U.S. Dollars in thousands

	Note	June 30, 2009	June 30, 2008
ASSETS			
CURRENT ASSETS:			
Cash and cash equivalents	3	$ 2,339	$ 323
Marketable securities	4		1,185
Prepaid expenses		100	350
Accounts receivable from the Office of the Chief Scientist		383	119
Other accounts receivable		113	130
Total current assets		2,935	2,107
LONG-TERM ASSETS:			
Long-term deposits and restricted deposits		171	201
Severance pay fund		154	127
Property and equipment, net	5	1,203	1,149
Total long-term assets		1,528	1,477
Total assets		$ 4,463	$ 3,584

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

CONSOLIDATED BALANCE SHEETS

U.S. Dollars in thousands (except share and per share data)

	Note	June 30, 2009	June 30, 2008
LIABILITIES AND STOCKHOLDERS EQUITY			
CURRENT LIABILITIES			
Trade payables		$ 487	$ 622
Accrued expenses		81	154
Other accounts payable	6	272	296
Total current liabilities		840	1,072
LONG-TERM LIABILITIES			
Long-term obligation		23	36
Accrued severance pay		206	147
		229	183
COMMITMENTS AND CONTINGENCIES	7		
STOCKHOLDERS EQUITY	8		
Share capital:			
Common stock $0.00001 par value:			
Authorized: 30,000,000 shares.			
Issued: 14,738,693 shares, outstanding: 13,676,886 shares as of June 30, 2009.			
Issued and outstanding: 6,941,715 shares as of June 30, 2008.		- (*)	- (*)
Additional paid-in capital		36,046	28,345
Accumulated deficit during the development stage		(32,652)	(26,016)
		3,394	2,329
		$ 4,463	$ 3,584

(*) Less than $1.

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

CONSOLIDATED STATEMENTS OF OPERATIONS

U.S. Dollars in thousands (except share and per share data)

	Note	Year ended June 30,			Period from May 11, 2001 (Inception) through June 30,
		2009	2008	2007	2009
Research and development expenses		$ 4,792	$ 5,077	$ 3,084	$ 17,157
Less participation by the Office of the Chief Scientist		(1,651)	(684)	(535)	(3,250)
Research and development expenses,net		3,141	4,393	2,549	13,907
General and administrative expenses		3,417	6,036	3,726	17,373
Know how write-off				1,963	2,474
Gross loss		(6,558)	(10,429)	(8,238)	(33,754)
Financial expenses (income), net	9	78	69	191	(1,102)
Net loss for the period		$ (6,636)	$ (10,498)	$ (8,429)	$ (32,652)
Loss per share:					
Basic and diluted net loss per share		$ (0.63)	$ (1.63)	$ (5.84)	
Weighted average number of shares used in computing basic and diluted net loss per share:		10,602,880	6,422,364	1,442,367	

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (DEFICIENCY)

U.S. Dollars in thousands (except share data)

	Common Stock		Additional Paid-in Capital	Receipts on Account of Common Stock	Deficit Accumulated During the Development Stage	Total Stockholders Equity (Deficiency)
	Shares	Amount				
Issuance of common stock on July 9, 2001	175,500	$ (*)	$ 3	$	$	$ 3
Balance as of June 30, 2001	175,500	(*)	3			3
Net loss					(78)	(78)
Balance as of June 30, 2002	175,500	(*)	3		(78)	(75)
Issuance of common stock on October 14, 2002, net of issuance expenses of $17	70,665	(*)	83			83
Forgiveness of debt			12			12
Stock cancelled on March 19, 2003	(136,500)	(*)	(*)			
Receipts on account of stock and warrants, net of finders and legal fees of $56				933		933
Net loss					(463)	(463)
Balance as of June 30, 2003	109,665	$ (*)	$ 98	$ 933	$ (541)	$ 490

(*) Less than $1.

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (DEFICIENCY)

U.S. Dollars in thousands (except share and per share data)

	Common Stock		Additional Paid-in Capital	Receipts on Account of Common Stock	Deficit Accumulated During the Development Stage	Total Stockholders Equity (Deficiency)
	Shares	Amount				
Balance as of July 1, 2003	109,665	$ (*)	$ 98	$ 933	$ (541)	$ 490
Issuance of common stock on July 16, 2003, net of issuance expenses of $70	3,628	(*)	1,236	(933)		303
Issuance of common stock on January 20, 2004	15,000	(*)				(*)
Issuance of warrants on January 20, 2004 for finder s fee			192			192
Common stock granted to consultants on February 11, 2004	5,000	(*)	800			800
Stock based compensation related to warrants granted to consultants on December 31, 2003			358			358
Exercise of warrants on April 19, 2004	1,500	(*)	225			225
Net loss for the year					(2,011)	(2,011)
Balance as of June 30, 2004	134,793	$ (*)	$ 2,909	$	$ (2,552)	$ 357

(*) Less than $1.

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (DEFICIENCY)

U.S. Dollars in thousands (except share and per share data)

	Common Stock		Additional Paid-in Capital	Deficit Accumulated During the Development Stage	Total Stockholders Equity (Deficiency)
	Shares	Amount			
Balance as of July 1, 2004	134,793	$ (*)	$ 2,909	$ (2,552)	$ 357
Stock-based compensation related to warrants granted to consultants on September 30, 2004			162		162
Issuance of common stock and warrants on November 30, 2004 related to the October 2004 Agreement net of issuance costs of $29	16,250	(*)	296		296
Issuance of common stock and warrants on January 26, 2005 related to the October 2004 Agreement net of issuance costs of $5	21,500	(*)	425		425
Issuance of common stock and warrants on January 31, 2005 related to the January 31, 2005 Agreement	35,000	(*)			(*)
Issuance of common stock and options on February 15, 2005 to former director of the Company	250	(*)	14		14
Issuance of common stock and warrants on February 16, 2005 related to the January 31, 2005 Agreement	25,000	(*)			(*)

(*) Less than $1.

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (DEFICIENCY)

U.S. Dollars in thousands (except share and per share data)

	Common Stock		Additional Paid-in Capital	Deficit Accumulated During the Development Stage	Total Stockholders Equity (Deficiency)
	Shares	Amount			
Issuance of warrants on February 16, 2005 for finder fee related to the January 31, 2005 Agreement			144		144
Issuance of common stock and warrants on March 3, 2005 related to the January 24, 2005 Agreement net of issuance costs of $24	60,000	(*)	1,176		1,176
Issuance of common stock on March 3, 2005 for finder fee related to the January 24, 2005 Agreement	9,225	(*)	(*)		
Issuance of common stock and warrants on March 3, 2005 related to the October 2004 Agreement net of issuance costs of $6	3,750	(*)	69		69
Issuance of common stock and warrants to the Chief Executive Officer on March 23, 2005	12,000	(*)	696		696
Issuance of common stock on March 23, 2005 related to the October 2004 Agreement	1,000	(*)	20		20

(*) Less than $1.

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (DEFICIENCY)

U.S. Dollars in thousands (except share and per share data)

	Common Stock		Additional Paid-in Capital	Deficit Accumulated During the Development Stage	Total Stockholders Equity (Deficiency)
	Shares	Amount			
Classification of a liability in respect of warrants to additional paid in capital, net of issuance costs of $ 178			542		542
Net loss for the year				(2,098)	(2,098)
Balance as of June 30, 2005	318,768	(*)	6,453	(4,650)	1,803
Exercise of warrants on November 28, 2005 to finders related to the January 24, 2005 agreement	400	(*)			
Exercise of warrants on January 25, 2006 to finders related to the January 25, 2005 Agreement	50	(*)			
Reclassification of warrants from equity to liabilities due to application of EITF 00-19			(8)		(8)
Net loss for the year				(2,439)	(2,439)
Balance as of June 30, 2006	319,218	$ (*)	$ 6,445	$ (7,089)	$ (644)

(*) Less than $1.

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (DEFICIENCY)

U.S. Dollars in thousands (except share and per share data)

	Common Stock		Additional Paid-in Capital	Receipts on Account of Common Stock	Accumulated Other Comprehensive Loss	Deficit Accumulated During the Development Stage	Total Stockholders Equity
	Shares	Amount					
Balance as of July 1, 2006	319,218	$ (*)	$ 6,445	$	$	$ (7,089)	$ (644)
Conversion of convertible debenture, net of issuance costs of $440	1,019,815	(*)	1,787				1,787
Classification of a liability in respect of warrants			360				360
Classification of deferred issuance expenses			(379)				(379)
Classification of a liability in respect of options granted to non-employees consultants			116				116
Compensation related to options granted to employees and directors			2,386				2,386
Compensation related to options granted to non-employees consultants			938				938
Exercise of warrants related to the April 3, 2006 agreement net of issuance costs of $114	75,692	(*)	1,022				1,022

(*) Less than $1.

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (DEFICIENCY)

U.S. Dollars in thousands (except share and per share data)

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Receipts on Account of Common Stock	Accumulated Other Comprehensive Loss	Deficit Accumulated During the Development Stage	Total Stockholders Equity	Total Comprehensive Loss
Cashless exercise of warrants related to the April 3, 2006 agreement	46,674	(*)	(*)					
Issuance of common stock on May and June 2007 related to the May 14, 2007 agreement, net of issuance costs of $64	3,126,177	(*)	7,751				7,751	
Receipts on account of shares				368			368	
Cashless exercise of warrants related to the May 14, 2007 issuance	366,534	(*)	(*)					
Issuance of warrants to investors related to the May 14, 2007 agreement			651				651	
Unrealized loss on available for sale securities					(30)		(30)	$ (30)
Net loss for the year						(8,429)	(8,429)	(8,429)
Balance as of June 30, 2007	4,954,110	$ (*)	$ 21,077	$ 368	$ (30)	$ (15,518)	$ 5,897	
Total comprehensive loss								$ (8,459)

(*) Less than $1.

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (DEFICIENCY)

U.S. Dollars in thousands (except share and per share data)

	Common Stock Shares	Common Stock Amount	Additional Paid-in Capital	Receipts on Account of Common Stock	Accumulated Other Comprehensive Loss	Deficit Accumulated During the Development Stage	Total Stockholders Equity	Total Comprehensive Loss
Balance as of July 1, 2007	4,954,110	$ (*)	$ 21,077	$ 368	$ (30)	$ (15,518)	$ 5,897	
Issuance of common stock related to investors relation agreements	69,500	(*)	275				275	
Issuance of common stock in July 2007 - June 2008 related to the May 14, 2007 Agreement	908,408	(*)	2,246	(368)			1,878	
Cashless exercise of warrants related to the May 14, 2007 Agreement	1,009,697	(*)	(*)					
Compensation related to options granted to employees and directors			4,204				4,204	
Compensation related to options granted to non employees consultants			543				543	
Realized loss on available for sale securities					30		30	$ 30
Net loss for the year						(10,498)	(10,498)	(10,498)
Balance as of June 30, 2008	6,941,715	$ (*)	$ 28,345	$	$	$ (26,016)	$ 2,329	
Total comprehensive loss								$ (10,468)

(*) Less than $1.

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

STATEMENTS OF CHANGES IN STOCKHOLDERS EQUITY (DEFICIENCY) (UNAUDITED)

U.S. Dollars in thousands (except share and per share data)

	Common Stock		Additional Paid-in Capital	Deficit Accumulated During the Development Stage	Total Stockholders Equity
	Shares	Amount			
Balance as of July 1, 2008	6,941,715	$ (*)	$ 28,345	$ (26,016)	$ 2,329
Issuance of common stock related to investor relations agreements	171,389	(*)	133		133
Issuance of common stock and warrants related to the August 6, 2008 agreement, net of issuance costs of $125	1,391,304	(*)	1,475		1,475
Issuance of common stock and warrants related to the September 2008 agreement, net of issuance costs of $62	900,000	(*)	973		973
Issuance of common stock and warrants in November 2008 - January 2009, net of issuance costs of $39	1,746,575	(*)	660		660
Issuance of common stock and warrants related to the January 20, 2009 agreement, net of issuance costs of $5	216,818	(*)	90		90
Issuance of common stock and warrants related to the January 29, 2009 agreement, net of issuance costs of $90	969,826	(*)	1,035		1,035
Issuance of common stock and warrants related to the May 5, 2009 agreement, net of issuance costs of $104	888,406	(*)	1,229		1,229
Compensation related to options granted to employees and directors			1,315		1,315
Compensation related to options and warrants granted to non employees consultants			97		97
Compensation related to restricted stock granted to employees and directors	427,228	(*)	642		642
Compensation related to restricted stock granted to non employees consultants	23,625	(*)	52		52
Net loss for the period				(6,636)	(6,636)
Balance as of June 30, 2009	13,676,886	$ (*)	$ 36,046	$ (32,652)	$ 3,394

(*) Less than $1.

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. Dollars in thousands

	Year ended June 30,			Period from May 11, 2001 (inception) through June 30
	2009	**2008**	**2007**	**2009**
CASH FLOWS FROM OPERATING ACTIVITIES:				
Net loss	$ (6,636)	$ (10,498)	$ (8,429)	$ (32,652)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation	173	129	56	545
Capital loss			20	4
Impairment of property and equipment	5	47		52
Know-how write-off			1,963	2,474
Amortization of deferred issuance costs			168	604
Stock-based compensation to employees and directors	1,957	4,204	2,386	8,547
Stock-based compensation to non-employees consultants	149	561	920	2,298
Stock compensation to service providers and investor relations consultants	133	275		1,200
Know-how licensors imputed interest				55
Salary grant in shares and warrants				711
Decrease (increase) in other accounts receivable	(247)	336	(481)	(485)
Decrease (increase) in prepaid expenses	250	(308)	20	(10)
Increase (decrease) in trade payables	(54)	237	(1)	457
Increase (decrease) in other accounts payable and accrued expenses	(96)	74	189	(135)
Increase in accrued interest due to related parties				3
Linkage differences and interest on long-term restricted lease deposit				(2)
Change in fair value of liability in respect of warrants			(716)	(2,696)
Fair value of warrants granted to investors			651	651
Amortization of discount and changes in accrued interest on convertible debentures			111	128
Amortization of discount and changes in accrued interest from marketable securities	(3)	(1)	(5)	(9)
Loss from sale of investments of available-for-sale marketable securities	75	31		106
Impairment and realized loss on available-for-sale marketable securities		372		372
Accrued severance pay, net	32	4	(4)	52
Net cash used in operating activities	$ (4,262)	$ (4,537)	$ (3,152)	$ (17,730)

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. Dollars in thousands

	Year ended June 30,			Period from May 11, 2001 (inception) through June 30
	2009	**2008**	**2007**	**2009**
CASH FLOWS FROM INVESTING ACTIVITIES:				
Acquisition of Pluristem Ltd. (1)	$	$	$	$ 32
Purchase of property and equipment	(313)	(840)	(209)	(1,605)
Proceeds from sale of property and equipment		3	1	32
Investment in long-term deposits	(8)	(85)	(96)	(217)
Repayment of long-term restricted deposit	38	6		64
Purchase of available for sale marketable securities			(3,784)	(3,784)
Proceeds from sale of available for sale marketable securities	1,113	2,201		3,314
Purchase of know-how			(1,963)	(2,062)
Net cash provided by (used in) investing activities	830	1,285	(6,051)	(4,226)
CASH FLOWS FROM FINANCING ACTIVITIES:				
Issuance of common stock and warrants, net of issuance costs	5,462	$ 2,246	$ 7,751	21,391
Receipts on account of shares		(368)	368	
Exercise of warrants			1,022	1,022
Issuance of convertible debenture				2,584
Issuance expenses related to convertible debentures			(440)	(440)
Repayment of know-how licensors			(219)	(300)
Repayment of notes and loan payable to related parties				(70)
Proceeds from notes and loan payable to related parties				78
Receipt of long-term loan		49		49
Repayment of long-term loan	(14)	(5)		(19)
Net cash provided by financing activities	5,448	1,922	8,482	24,295
Increase (decrease) in cash and cash equivalents	2,016	(1,330)	(721)	2,339
Cash and cash equivalents at the beginning of the period	323	1,653	2,374	
Cash and cash equivalents at the end of the period	$ 2,339	$ 323	$ 1,653	$ 2,339
(a) Supplemental disclosure of cash flow activities:				
Cash paid during the period for:				
Taxes paid due to non-deductible expenses	$ 33	$ 5	$ 3	$ 47

Interest paid	$ 3	$ 3	$ 4	$ 16

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

CONSOLIDATED STATEMENTS OF CASH FLOWS

U.S. Dollars in thousands

	Year ended June 30,			Period from May 11, 2001 (inception) through June 30
	2009	2008	2007	2009
(b) Supplemental disclosure of non-cash activities:				
Classification of liabilities and deferred issuance expenses into equity	$	$	$ 97	$ 97
Conversion of convertible debenture	$	$	$ 2,227	$ 2,227
Prepaid expenses of compensation related to options to non-employees consultants	$	$ (18)	$ 18	$
Purchase of property and equipment	$ 20	$ 101	$ 81	$ 20

(1) Acquisition of Pluristem Ltd.

Fair value of assets acquired and liabilities assumed at the acquisition date:	
Working capital (excluding cash and cash equivalents)	$ (427)
Long-term restricted lease deposit	19
Property and equipment	130
In-process research and development write-off	246
	$ (32)

The accompanying notes are an integral part of the consolidated financial statements.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 1: GENERAL

a. Pluristem Therapeutics Inc. (the Company), a Nevada corporation, was incorporated and commenced operations on May 11, 2001, under the name A. I. Software Inc. which was changed as of June 30, 2003 to Pluristem Life Systems Inc. On November 26, 2007, the Company s name was changed to Pluristem Therapeutics Inc. The Company has a wholly owned subsidiary, Pluristem Ltd. (the Subsidiary), which is incorporated under the laws of Israel.

b. The Company is devoting substantially all of its efforts towards conducting research and development of adherent stromal cells production technology and the commercialization of cell therapy products. Accordingly, the Company is considered to be in the development stage, as defined in Statement of Financial Accounting Standards No. 7 Accounting and reporting by Development stage Enterprises . In the course of such activities, the Company and its Subsidiary have sustained operating losses and expect such losses to continue in the foreseeable future. The Company and its Subsidiary have not generated any revenues or product sales and have not achieved profitable operations or positive cash flows from operations. The Company s accumulated losses during the development stage aggregated to $32,652 through June 30, 2009 and incurred net loss of $6,636 and negative cash flow from operating activities in the amount of $4,262 for the year ended June 30, 2009. There is no assurance that profitable operations, if ever achieved, could be sustained on a continuing basis.

The Company plans to continue to finance its operations with sales of equity securities and R&D grants and in the longer term, from revenues from product sales. There are no assurances, however, that the Company will be successful in obtaining an adequate level of financing needed for the long-term development and commercialization of its planned products.

These conditions raise substantial doubt about the Company s ability to continue as a going concern. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

c. Since December 10, 2007, the Company s shares of common stock have been traded on the NASDAQ Capital Market under the symbol PSTI. The shares were previously traded on the OTC Bulletin Board under the trading symbol PLRS.OB . On May 7, 2007, the Company s shares also began trading on Europe s Frankfurt Stock Exchange, under the symbol PJT. .

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES

The consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles (U.S. GAAP) applied on consistent basis.

a. Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates, judgments, and assumptions that are reasonable based upon information available at the time they are made. These estimates, judgments and assumptions can affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

b. Functional currency of the Subsidiary

It is anticipated that the majority of the Subsidiary s revenues will be generated outside Israel and will be determined in U.S. Dollars (dollars). In addition, most of the financing of the Subsidiary s operations has been made in dollars. The Company s management believes that the dollar is the primary currency of the economic environment in which the Subsidiary operates. Thus, the functional currency of

the Subsidiary is the dollar. Accordingly, monetary accounts maintained in currencies other than the dollar are remeasured into dollars in accordance with Statement of Financial Accounting Standards No. 52 Foreign Currency Translation (SFAS 52). All transaction gains and losses from the remeasurement of monetary balance sheet items are reflected in the statement of operations as financial income or expenses, as appropriate.

c. Principles of consolidation

The consolidated financial statements include the accounts of the Company and its Subsidiary. Intercompany transactions and balances have been eliminated upon consolidation.

d. Cash equivalents

Cash equivalents are short-term highly liquid investments that are readily convertible to cash with maturities of three months or less at the date acquired.

e. Marketable securities:

Management determines the appropriate classification of its investments in marketable securities at the time of purchase and re-evaluates such designations as of each balance sheet date. During 2008, all marketable securities covered by Statement of Financial Accounting Standards No. 115 Accounting for Certain Investments in Debt and Equity Securities were designated as available-for-sale.

Accordingly, these securities are stated at fair value, with unrealized gains and losses reported in accumulated other comprehensive loss, a separate component of shareholders equity, net of taxes. Realized gains and losses on sales of investments, and impairment of investments, as determined on a specific identification basis, are included in the consolidated statement of operations. Interest and amortization of premium and discount on debt securities are recorded as financial income or loss.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (CONT.)

e. Marketable securities (cont.):

Financial Accounting Statements Board (FASB) Staff Position (FSP) 115-1, The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investment (FSP 115-1) provides guidance for determining when an investment is considered impaired, whether impairment is other-than temporary, and measurement of an impairment loss. An investment is considered impaired if the fair value of the investment is less than its cost. If, after consideration of all available evidence to evaluate the realizable value of its investment, impairment is determined to be other than- temporary, then an impairment loss should be recognized equal to the difference between the investment s cost and its fair value.

In April 2009, the FASB issued FSP FAS 115-2, Recognition and Presentation of Other-Than-Temporary Impairments (FSP 115-2). The FSP is intended to provide greater clarity to investors about the credit and noncredit component of an other-than-temporary impairment event and to more effectively communicate when an other-than-temporary impairment event has occurred. The FSP applies to fixed maturity securities only and requires separate display of losses related to credit deterioration and losses related to other market factors. When an entity does not intend to sell the security and it is more likely than not that an entity will not have to sell the security before recovery of its cost basis, it must recognize the credit component of an other-than-temporary impairment in earnings and the remaining portion in other comprehensive income. Upon adoption of the FSP, an entity will be required to record a cumulative-effect adjustment as of the beginning of the period of adoption to reclassify the noncredit component of a previously recognized other-than-temporary impairment from retained earnings to accumulated other comprehensive income. The adoption did not have a material effect on the

U.S. Dollars in thousands (except per share amounts)

Company s consolidated financial statements.

f. Long-term restricted deposit

Long-term restricted deposit with maturities of more than one year used to secure lease agreement and hedge transactions is presented at cost.

g. Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is calculated by the straight-line method over the estimated useful lives of the assets, at the following annual rates:

	%
Laboratory equipment	10
Computers and peripheral equipment	33
Office furniture and equipment	6-15
Vehicles	15
Leasehold improvements	over the shorter of the expected useful life or the reasonable assumed term of the lease.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (CONT.)

h. Impairment of long-lived assets

The Company s long-lived assets and identifiable intangibles are reviewed for impairment in accordance with Statement of Financial Accounting Standards No. 144 Accounting for the Impairment or Disposal of Long-Lived Assets (SFAS 144) whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of the assets to the future undiscounted cash flows expected to be generated by the assets. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. During the years ended June 30, 2009, 2008, and 2007 an impairment loss was identified in the amounts of $5, $47 and $0, respectively.

i. Accounting for stock-based compensation:

The Company accounts for stock-based compensation in accordance with Statement of Financial Accounting Standards No. 123 (revised 2004), Share-Based Payment (SFAS 123(R)). SFAS 123(R) requires companies to estimate the fair value of equity-based payment awards on the date of grant using an option-pricing model. The value of the portion of the award that is ultimately expected to vest is recognized as an expense over the requisite service periods in the Company s consolidated income statements.

The Company recognizes compensation expenses for the value of its awards, which have graded vesting based on the accelerated method over the requisite service period of each of the awards.

The Company estimates the fair value of stock options granted using the Black-Scholes-Merton option-pricing model. The option-pricing model requires a number of assumptions, of which the most significant are, expected stock price volatility, and the expected option term.

U.S. Dollars in thousands (except per share amounts)

Expected volatility was calculated based upon actual historical stock price movements over the most recent periods ending on the grant date. The expected life of options granted is calculated using the Simplified Method, as defined in Staff Accounting Bulletin No. 107, Share-Based Payments , as the average between the vesting period and the contractual life of the options. On December 21, 2007 the SEC staff issued Staff Accounting Bulletin No. 110 (SAB 110), which, effective January 1, 2008, amends and replaces SAB 107, Share-Based Payments .

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (CONT.)

i. Accounting for stock-based compensation (cont.):

The Company currently uses the Simplified Method as adequate historical experience is not available to provide a reasonable estimate. The Company adopted SAB 110 effective January 1, 2008 and will continue to apply the Simplified Method until enough historical experience is available to provide a reasonable estimate of the expected term for stock option grants.

The Company has historically not paid dividends and has no foreseeable plans to issue dividends. The risk-free interest rate is based on the yield from U.S. Treasury zero-coupon bonds with an equivalent term. The expected pre-vesting forfeiture rate affects the number of exercisable options. Based on Company s historical experience, the pre-vesting forfeiture rate per grant is 5%.

The fair value of the Company s stock options granted to employees and directors for the years ended June 30, 2009, 2008 and 2007 was estimated using the following assumptions:

	Year Ended June 30,		
	2009	**2008**	**2007**
Risk free interest rate	1.8 - 3.3 %	3.8 - 4.4 %	4.4 - 4.8 %
Dividend yields	0%	0%	0%
Volatility	129 - 132 %	127 - 130 %	105 - 128 %
Expected term of up to (in years)	6	6	6

The assumptions below are relevant to restricted shares granted in 2009:

In accordance with SFAS No. 123(R), restricted shares are measured at their fair value as if it was vested and issued on the grant date. All restricted shares to employees and non-employees granted in 2009 were granted for no consideration or for a voluntary reduction in cash compensation; therefore their fair value was equal to the share price at the date of grant.

The fair value of all restricted shares was determined based on the close trading price of the Company s shares known at the grant date. The weighted average grant date fair value of shares granted during the year was $0.97.

The Company applies SFAS 123(R) and EITF 96-18, Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services , with respect to options and warrants issued to non-employees. SFAS 123(R) requires the use of option valuation models to measure the fair value of the options and warrants at the measurement date.

j. Research and Development expenses and royalty-bearing grants

Research and development expenses, net of participations are charged to the Statement of Operations as incurred.

Royalty-bearing grants from the government of Israel for funding approved research and development projects are recognized at the time the Company is entitled to such grants, on the basis of the cost incurred and applied as a deduction from research and development costs.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (CONT.)

k. Loss per share

Basic net loss per share is computed based on the weighted average number of shares of common stock outstanding during each year. Diluted net loss per share is computed based on the weighted average number of shares of Common stock outstanding during each year, plus dilutive potential shares of common stock and warrants considered outstanding during the year, in accordance with Statement of Financial Accounting Standard No. 128, Earnings Per Share (SFAS 128). All outstanding stock options have been excluded from the calculation of the diluted loss per common share because all such securities are anti-dilutive for each of the periods presented.

l. Income taxes

The Company and its Subsidiary account for income taxes in accordance with Statement of Financial Accounting Standards No. 109, Accounting for Income Taxes (SFAS 109). This Statement prescribes the use of the liability method, whereby deferred tax assets and liability account balances are determined based on differences between financial reporting and tax bases of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company and its Subsidiary provide a valuation allowance, if necessary, to reduce deferred tax assets to their estimated realizable value.

In July 2006, the FASB issued FASB interpretation (FIN) No. 48, Accounting for Uncertainty in Income Taxes an Interpretation of FASB Statement 109 (FIN 48). FIN 48 establishes a single model to address accounting for uncertain tax positions. FIN 48 clarified the accounting for income taxes by prescribing the minimum recognition threshold a tax position is required to meet before being recognized in the financial statements. FIN 48 also provides guidance on recognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure and transition. The adoption of the provisions of FIN 48 did not have a material impact on the Company s consolidated financial position and results of operation.

m. Concentration of credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents, restricted deposits and marketable securities.

The majority of the Company s cash and cash equivalents are invested in dollar instruments of major banks in Israel. Management believes that the financial institutions that hold the Company s investments are financially sound and accordingly, minimal credit risk exists with respect to these investments.

The Company and its Subsidiary have no significant off-balance sheet concentration of financial instruments subject to credit risk such as foreign exchange contracts.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (CONT.)

n. Severance pay

The Subsidiary s liability for severance pay is calculated pursuant to Israeli severance pay law based on the most recent salary of the employees multiplied by the number of years of employment, as of the balance sheet date. Employees are entitled to one month s salary for each year of employment or a portion thereof. The Company s liability for all of its employees is fully provided by monthly deposits with insurance policies and by an accrual. The value of these policies is recorded as an asset in the Company s balance sheet.

The deposited funds include profits or losses accumulated up to the balance sheet date. The deposited funds may be withdrawn only upon the fulfillment of the obligation pursuant to Israeli severance pay law or labor agreements. The value of the deposited funds is based on the cash surrendered value of these policies, and includes immaterial profits or losses.

Severance expenses for the years ended June 30, 2009, 2008 and 2007 amounted to approximately $120, $88, and $40, respectively.

o. Fair value of financial instruments

The carrying amounts of our financial instruments, including cash and cash equivalents, short-term deposits, trade receivable, trade payable and other accounts payable and accrued liabilities, approximate fair value because of their generally short term maturities.

Effective January 1, 2008, the Company adopted Statement of Financial Accounting Standards No. 157, Fair Value Measurements, and effective October 10, 2008, adopted FSP SFAS 157-3, Determining the Fair Value of a Financial Asset When the Market for That Asset Is Not Active, except as it applies to the nonfinancial assets and nonfinancial liabilities subject to FSP 157-2. SFAS 157 clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. As a basis for considering such assumptions, SFAS 157 establishes a three-tier value hierarchy, which prioritizes the inputs used in the valuation methodologies in measuring fair value:

Level 1 Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 Include other inputs that are directly or indirectly observable in the marketplace.

Level 3 Unobservable inputs, which are supported by little or no market activity.

1. The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

p. Comprehensive income

The Company reports comprehensive income in accordance with SFAS 130, Reporting Comprehensive Income . This statement establishes standards for the reporting and display of comprehensive income and its components in a full set of general purpose financial statements. Comprehensive income generally represents all changes in stockholders equity during the period except those resulting from investments by, or distributions to, stockholders. The Company determined that their items of other comprehensive income relate to unrealized gains and losses on available for sale securities.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (CONT.)

q. Derivative financial instruments

The Company accounts for derivatives and hedging based on SFAS 133, Accounting for Derivative Instruments and Hedging Activities . SFAS 133 requires the Company to recognize all derivatives on the balance sheet at fair value. If the derivatives meet the definition of a hedge and are so designated, depending on the nature of the hedge, changes in the fair value of derivatives will either be offset against the change in fair value of the hedged assets, liabilities, or firm commitments through earnings, or recognized in other comprehensive income until the hedged item is recognized in earnings. The ineffective portion of a derivative s change in fair value is recognized in earnings.

The Company s derivative instruments are outstanding forward contracts that did not meet the definition of hedge accounting thus the gain or loss resulting from changes in fair value is recognized as a financial expense in current earnings during the period of change. As of June 30, 2009 and 2008, the Company had forward contracts to sell $1,050 and purchase NIS 4,375 and to sell $150 and purchase NIS 533, respectively.

The fair value of the forward contracts and the options as of June 30, 2009 and 2008 were recorded as an asset of $67 and $10, respectively.

r. Impact of recently issued accounting standards

Statement of Financial Accounting Standards No. 160 (SFAS 160) establishes accounting and reporting standards that require that the ownership interests in subsidiaries held by parties other than the parent be clearly identified, labeled, and presented in the consolidated statement of financial position within equity, but separate from the parent s equity; the amount of consolidated net income attributable to the parent and to the noncontrolling interest be clearly identified and presented on the face of the consolidated statement of income; and changes in a parent s ownership interest while the parent retains its controlling financial interest in its subsidiary be accounted for consistently. SFAS 160 is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2008. The adoption of SFAS 160 does not have a material effect on the Company s consolidated financial statements.

In December 2007, the FASB issued SFAS 141 (revised 2007), Business Combinations (SFAS 141R). SFAS 141R establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any non controlling interest in the acquiree and the goodwill acquired. SFAS 141R also establishes disclosure requirements to enable the evaluation of the nature and financial effects of the business combination. SFAS 141R is effective for fiscal years beginning after December 15, 2008. Earlier adoption is prohibited. The adoption of SFAS 141(R) does not have a material effect on the Company s consolidated financial statements.

In March 2008, the FASB issued Statement of Financial Accounting Standards No. 161 Disclosures about Derivative Instruments and Hedging Activities (SFAS 161), an amendment to SFAS 133. This statement changes the disclosure requirements for derivative instruments and hedging activities. Entities are required to provide enhanced disclosures about (a) how and why an entity uses derivative instruments, (b) how derivative instruments and related hedged items are accounted for under Statement 133 and its related interpretations, and (c) how derivative instruments and related hedged items affect an entity s financial position, financial performance, and cash flows. This statement is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008. Early application is encouraged. The Company does not expect the adoption of SFAS 161 to have an impact on its financial position, statements of operations or cash flows.

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (CONT.)

r. Impact of recently issued accounting standards (cont.):

In April 2008, the FASB issued FSP FAS 142-3, Determination of the Useful Life of Intangible Assets. (FSP FAS 142-3). FSP FAS 142-3 amends the factors that should be considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under SFAS No. 142, Goodwill and Other Intangible Assets. FSP FAS 142-3 is effective for fiscal years beginning after December 15, 2008 and early adoption is prohibited. The adoption of FSP FAS 142-3 is not expected to have a material effect on the Company s consolidated financial statements.

In February 2008, the FASB issued FSP FAS 157-2, Effective Date of FASB Statement No. 157 (FSP FAS 157-2), to delay the effective date of SFAS 157 for one year for certain nonfinancial assets and nonfinancial liabilities, excluding those that are recognized or disclosed in financial statements at fair value on a recurring basis (that is, at least annually). For purposes of applying the FSP FAS 157-2, nonfinancial assets and nonfinancial liabilities include all assets and liabilities other than those meeting the definition of a financial asset or a financial liability in SFAS Statement 159. FSP FAS 157-2 defers the effective date of SFAS 157 to fiscal years beginning after November 15, 2008, and interim periods within those fiscal years for items within the scope of FSP FAS 157-2. The Company does not expect the adoption of FSP FAS 157 for the certain nonfinancial assets and nonfinancial liabilities, excluding those that are recognized or disclosed in the financial statements at fair value on a recurring basis, to have a material impact on its financial position, statements of operations or cash flows.

In April 2009, the FASB issued FSP FAS 157-4, Determining Fair Value When Volume and Level of Activity for the Asset or Liability Have Significantly Decreased and Identifying Transactions That Are Not Orderly (FSP 157-4). FSP 157-4 provides guidance on how to determine the fair value of assets and liabilities when the volume and level of activity for the asset/liability has significantly decreased. FSP 157-4 also provides guidance on identifying circumstances that indicate a transaction is not orderly. In addition, FSP 157-4 requires disclosure in interim and annual periods of the inputs and valuation techniques used to measure fair value and a discussion of changes in valuation techniques. FSP 157-4 is effective for the Company s consolidated financial statements of fiscal year 2009. The adoption of FSP 157-4 does not have a material impact on the Company s consolidated financial statements.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (CONT.)

r. Impact of recently issued accounting standards (cont.):

In April 2009, the FASB issued FSP FAS 115-2 and FAS 124-2, Recognition and Presentation of Other-Than-Temporary Impairment (FSP 115-2/124-2). FSP 115-2/124-2 amends the requirements for the recognition and measurement of other-than-temporary impairments for debt securities by modifying the pre-existing intent and ability indicator. Under FSP 115-2/124-2, an other-than-temporary impairment is triggered when there is an intent to sell the security, it is more likely than not that the security will be required to be sold before recovery, or the security is not expected to recover the entire amortized cost basis of the security. Additionally,

FSP 115-2/124-2 changes the presentation of an other-than-temporary impairment in the income statement for those impairments involving credit losses. The credit loss component will be recognized in earnings and the remainder of the impairment will be recorded in other comprehensive income. The adoption of FSP 115-2/124-2 does not have a material impact on the Company s consolidated financial statements.

In April 2009, the FASB issued FSP FAS 107-1 and APB 28-1, Interim Disclosure about Fair Value of Financial Instruments (FSP 107-1/APB 28-1). FSP 107-1/APB 28-1 requires interim disclosures regarding the fair values of financial instruments that are within the scope of FAS 107, Disclosures about the Fair Value of Financial Instruments. Additionally, FSP 107-1/APB 28-1 requires disclosure of the methods and significant assumptions used to estimate the fair value of financial instruments on an interim basis as well as changes of the methods and significant assumptions from prior periods. FSP 107-1/APB 28-1 does not change the accounting treatment for these financial instruments and does not have a material effect on the Company s consolidated financial statements.

In December 2007, the Emerging Issues Task Force (EITF) Issued the EITF 07-1, Accounting for Collaborative Arrangements (EITF 07-1). The guidance in EITF 07-1 defines collaborative arrangements and establishes presentation and disclosure requirements for transactions within a collaborative arrangement (both with third parties and between participants in the arrangement). The consensus in EITF 07-1 is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2008.

The consensus requires retrospective application to all collaborative arrangements existing as of the effective date, unless retrospective application is impracticable. The impracticability evaluation and exception should be performed on an arrangement-by-arrangement basis. The adoption of EITF 07-1 does not have a material effect on the Company s consolidated financial statements.

In June 2008, the FASB issued EITF 07-5 Determining whether an Instrument (or Embedded Feature) is indexed to an Entity s Own Stock (EITF 07-5). EITF 07-5 is effective for financial statements issued for fiscal years beginning after December 15, 2008, and interim periods within those fiscal years. Early application is not permitted. Paragraph 11(a) of SFAS 133 specifies that a contract that would otherwise meet the definition of a derivative but is both (a) indexed to the Company s own stock and (b) classified in stockholders equity in the statement of financial position would not be considered a derivative financial instrument. EITF 07-5 provides a new two-step model to be applied in determining whether a financial instrument or an embedded feature is indexed to an issuer s own stock and thus able to qualify for the SFAS 133 paragraph 11(a) scope exception. The adoption of EITF 07-5 does not have a material effect on the Company s consolidated financial statements.

NOTE 2: SIGNIFICANT ACCOUNTING POLICIES (CONT.)

r. Impact of recently issued accounting standards (cont.):

In May 2009, the FASB issued SFAS No. 165, Subsequent Events (SFAS 165), which establishes general standards of accounting for and disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued. This statement sets forth the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements. SFAS 165 also requires the disclosure of the date through which an entity has evaluated subsequent events and the basis for that date that is, whether that date represents the date the financial statements were issued or were available to be issued. This statement is effective for interim or annual reporting periods ending after June 15, 2009. During the period of 12 months ended June 30, 2009, the Company adopted SFAS 165. The adoption of SFAS 165 did not have a material effect on the Company s consolidated financial statements.

In June 2009, the FASB issued Statement of Financial Accounting Standards No. 166, Accounting for Transfers of Financial Assets an amendment of FASB Statement No. 140 (SFAS 166). SFAS 166 seeks to improve the relevance, representational faithfulness, and comparability of the information that a reporting entity provides in its financial statements about a transfer of financial assets; the effects of a transfer on its financial position, financial performance, and cash flows; and a transferor s continuing involvement, if any, in

U.S. Dollars in thousands (except per share amounts)

transferred financial assets. SFAS 166 is applicable for annual periods after November 15, 2009 and interim periods therein and thereafter. The Company has not determined the impact, if any, SFAS 166 will have on our consolidated financial statements.

In June 2009, the FASB issued Statement No. 167, Amendments to FASB Interpretation No. 46(R) (SFAS 167). SFAS 167 seeks to improve financial reporting by enterprises involved with variable interest entities. SFAS 167 is applicable for annual periods after November 15, 2009 and interim periods therein and thereafter. The Company has not determined the impact, if any, SFAS 167 will have on our consolidated financial statements.

In June 2009, the FASB issued Statement of Financial Accounting Standards No. 168, The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles (SFAS 168), and, in doing so, authorized the Codification as the sole source for authoritative U.S. GAAP. SFAS 168 will be effective for financial statements issued for reporting periods that end after September 15, 2009. Once it s effective, it will supersede all accounting standards in U.S. GAAP, aside from those issued by the SEC. SFAS 168 replaces SFAS 162 to establish a new hierarchy of GAAP sources for non-governmental entities under the FASB Accounting Standards Codification.

NOTE 3: CASH AND CASH EQUIVALENTS

	June 30,	
	2009	**2008**
In U.S. dollars	$ 2,209	$ 271
In New Israeli Shekels (NIS)	130	52
	$ 2,339	$ 323

NOTE 4: MARKETABLE SECURITIES

The following is a summary of available-for-sale marketable securities:

		June 30, 2008			
Time to maturity		**Amortized Cost**	**Gross unrealized gains**	**Gross unrealized losses**	**Estimated fair market value**
Corporate Bonds	More than five years	$ 518	$ -	$ -	$ 518
Preferred stock		667	-	-	667
		$ 1,185	$ -	$ -	$ 1,185

U.S. Dollars in thousands (except per share amounts)

	June 30, 2008			

In 2008, the marketable securities decline in value in the amount of $372 was evaluated by the Company s management as other than temporary, and was recognized as loss in the statement of operations. The recorded fair value is regarded as a new cost basis.

In the first quarter of 2009, the Company realized all of its holdings in U.S. bonds and preferred stock and recorded an additional loss in an amount of $75.

NOTE 5: PROPERTY AND EQUIPMENT, NET

	June 30,	
	2009	2008
Cost:		
Laboratory equipment	$ 1,102	$ 936
Computers and peripheral equipment	125	111
Office furniture and equipment	50	49
Leasehold improvements	279	238
Vehicle	63	63
Total Cost	1,619	1,397
Accumulated depreciation:		
Laboratory equipment	254	156
Computers and peripheral equipment	89	63
Office furniture and equipment	16	9
Leasehold improvements	40	13
Vehicle	17	7
Total accumulated depreciation	416	248
Property and equipment, net	$ 1,203	$ 1,149

Depreciation expenses amounted to $173, $129 and $56 for the years ended June 30, 2009, 2008 and 2007, respectively.

NOTE 6: OTHER ACCOUNTS PAYABLE

	June 30,	
	2009	2008

	June 30,	
Accrued payroll	$ 63	$ 87
Payroll institutions	50	74
Accrued vacation	151	127
Current maturities of long-term obligation	8	8
	$ 272	$ 296

NOTE 7: COMMITMENTS AND CONTINGENCIES

a. The Subsidiary leases facilities under operating lease agreements. The average monthly payment according to the original agreement was 32 thousand NIS (approximately $8). According to a supplement to the original lease agreement, signed on June 12, 2007, the Subsidiary expanded the leased area by additional 6,900 square feet; the leasing period for the leased area is 62 months as of July 1, 2007. The monthly payment is 64 thousand NIS starting from September 1, 2007 and is linked to the Israeli Consumer Price Index (CPI). In addition, the lessor refunded the Subsidiary the renovation costs up to an amount of 650 thousand NIS (approximately $162). The Subsidiary may shorten the leasing period for a period of 36 months, if an advanced notice is given in writing and an amount of 325 thousand NIS is paid. The Subsidiary may extend the leasing period in 60 months, if an advanced notice is given.

In order to secure these agreements, the Subsidiary pledged a deposit with the bank in the amount of $96. In addition, the Subsidiary has issued a bank guarantee in favor of the lessor in the amount of $90.

Lease expenses amounted $221, $193 and $90 for the years ended June 30, 2009, 2008 and 2007, respectively.

As of June 30, 2009 future rental commitments under the existing lease agreement and supplement are as follows:

Year ended June 30, 2010	$ 212
Year ended June 30, 2011	212
Year ended June 30, 2012	212
Year ended June 30, 2013	35
Total	$ 671

NOTE 7: COMMITMENTS AND CONTINGENCIES (CONT.)

b. The Subsidiary leases 11 cars under operating lease agreement, which expire in years 2010 and 2011. The monthly payment is approximately $8 and is linked to the CPI. In order to secure these agreements, the Subsidiary pledged a deposit in the amount of $25.

Lease expenses amounted to $86, $61 and $32 for the years ended June 30, 2009, 2008 and 2007, respectively.

U.S. Dollars in thousands (except per share amounts)

As of June 30, 2009 future rental commitments under the existing lease agreements are as follows:

Year ended June 30, 2010	$	95
Year ended June 30, 2011		59
Year ended June 30, 2012		12
Total	$	166

c. A deposit in the amount of $50 was pledged by the Subsidiary to secure the hedging transactions and a credit line.

d. Under the Law for the Encouragement of Industrial Research and Development, 1984, commonly referred to as the Research Law, research and development programs that meet specified criteria and are approved by a governmental committee of the Office of the Chief Scientist (OCS) are eligible for grants of up to 50% of the project s expenditures, as determined by the research committee, in exchange for the payment of royalties from the sale of products developed under the program. Regulations under the Research Law generally provide for the payment of royalties to the Chief Scientist of 3% to 5% on sales of products and services derived from a technology developed using these grants until 100% of the dollar-linked grant is repaid. The Company s obligation to pay these royalties is contingent on its actual sale of such products and services. In the absence of such sales, no payment is required. Effective for grants received from the Chief Scientist under programs approved after January 1, 1999, the outstanding balance of the grants will be subject to interest at a rate equal to the 12 month LIBOR applicable to dollar deposits that is published on the first business day of each calendar year. Following the full repayment of the grant, there is no further liability for royalties.

Through June 30, 2009 and 2008, total grants obtained aggregated $2,640 and $1,212, respectively.

e. See note 8 P relating the May 2007 Agreement.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS

a. The Company s authorized common stock consists of 30,000,000 shares with a par value of $0.00001 per share. All shares have equal voting rights and are entitled to one vote per share in all matters to be voted upon by stockholders. The shares have no pre-emptive, subscription, conversion or redemption rights and may be issued only as fully paid and non-assessable shares. Holders of the common stock are entitled to equal ratable rights to dividends and distributions with respect to the common stock, as may be declared by the Board of Directors out of funds legally available.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

On July 1, 2008, the authorized share capital of the Company was increase by authorizing 10,000,000 shares of preferred stock, par value $0.00001 each, with series, rights, preferences, privileges and restrictions as may be designated from time to time by the Company s Board of Directors.

b. On July 9, 2001, the Company issued 175,500 shares of common stock in consideration for $2.5, which was received on July 27, 2001.

c. On October 14, 2002, the Company issued 70,665 shares of common stock at a price of approximately $1.4 per common share in consideration for $100 before issuance costs of $17. On March 19, 2003, two directors each returned 68,250 shares of common stock with a par value of $2 per share, for cancellation, for no consideration.

d. In July 2003, the Company issued an aggregate of 3,628 units comprised of 3,628 shares of common stock and 7,256 warrants to a group of investors, for total consideration of $1,236 (net of issuance costs of $70), under a private placement. The consideration was paid partly in the year ended June 30, 2003 ($933) and the balance was paid in the year ended June 30, 2004.

In this placement each unit was comprised of one common stock and two warrants, the first warrant was exercisable within a year from the date of issuance for one share of common stock at a price of $450 per share. The second warrant is exercisable within five years from the date of issuance for one share of common stock at a price of $540 per share. All the warrants expired unexercised.

e. On January 20, 2004, the Company consummated a private equity placement with a group of investors (the Investors). The Company issued 15,000 units in consideration for net proceeds of $1,273 (net of issuance costs of $227). Each unit is comprised of 15,000 shares of common stock and 15,000 warrants. Each warrant is exercisable into one share of common stock at a price of $150 per share, and may be exercised until January 31, 2007. On March 18, 2004, a registration statement on Form SB-2 was declared effective and the above-mentioned common stock was registered for re-sale. If the effectiveness of the Registration Statement is suspended subsequent to the effective date of registration (March 18, 2004), for more than certain permitted periods, as described in the private equity placement agreement, the Company shall pay penalties to the Investors in respect of the liquidated damages.

According to EITF 00-19, Accounting for derivative financial instruments indexed to, and potentially settled in, a Company s own stock (EITF 00-19), the Company classified the warrants as liabilities according to their fair value as remeasured at each reporting period until exercised or expired. Changes in the fair value of the warrants were reported in the statements of operations as financial income or expense.

The Company allocated the gross amount received of $1,500 to the par value of the shares issued ($0.03) and to the liability in respect of the warrants issued ($1,499.97). The amount allocated to the liability was less than the fair value of the warrants at grant date. On January 31, 2007 all the warrants expired unexercised.

In addition, the Company issued 1,500 warrants to finders in connection with this private placement, exercisable into 1,500 common shares at a price of $150 per common share until January 31, 2007. The fair value of the warrants issued in the amounts of $192 was recorded as deferred issuance costs and is amortized over a period of three years. On April 19, 2004, the finders exercised the warrants.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

f. In October 2004, the Company effected a private placement offering (the October 2004 Agreement) pursuant to which it issued 42,500 units. Each unit is comprised of one common stock and one warrant. The warrant is exercisable for one common stock at an exercise price of $60 per share, subject to certain adjustments. The units were issued as follows:

In November 2004, the Company issued according to the October 2004 Agreement 16,250 units comprised of 16,250 shares of common stock and 16,250 warrants to a group of investors, for total consideration of $296 (net of cash issuance costs of $29), and additional 600 warrants to finders as finders fees.

In January 2005, the Company issued according to the October 2004 Agreement an additional 21,500 units for total consideration of $425 (net of cash issuance costs of $5), and additional 450 warrants were issued to finders as finders fees.

In March 2005, the Company issued according to the October 2004 Agreement additional 3,750 units for total consideration of $69 (net of cash issuance costs of $6), and additional 175 warrants were issued to finders as finders fees.

In March 2005, the Company issued according to the October 2004 Agreement 1,000 common shares and 1,000 share purchase warrants to one investor for total consideration of $20 which was paid to the Company in May 2005.

On November 30, 2006, all the warrants expired unexercised.

g. On January 24, 2005, the Company effected a private placement offering (the January 24, 2005 Agreement) which was closed on March 3, 2005 and issued 60,000 units in consideration for $1,176 (net of cash issuance costs of $24). Each unit is compromised of one share of common stock and one warrant. The warrant is exercisable for one share of common stock at a price of $60 per share. On November 30, 2006, all the warrants expired unexercised. Under this agreement the Company issued to finders 9,225 shares and 2,375 warrants with exercise price of $500 per share exercisable until November 2007. On November 30, 2007, 1,925 unexercised warrants expired.

h. On January 31, 2005, the Company consummated a private equity placement offering (the January 31, 2005 Agreement) with a group of investors according to which it issued 60,000 units in consideration for net proceeds of $1,137 (net of issuance costs of $63). Each unit is comprised of one share of common stock and one warrant. Each warrant is exercisable into one share of common stock at a price of $60 per share. The January 31, 2005 Agreement includes a finder s fee of a cash amount equal to 5% of the amount invested ($60) and issuance of warrants for number of shares equal to 5% of the number of shares that were issued (3,000) with an exercise price of $20 per share, subject to certain adjustments, exercisable until November 30, 2006.

According to EITF 00-19, the Company classified the warrants as liabilities according to their fair value as remeasured at each reporting period until exercised or expired. Changes in the fair value of the warrants will be reported in the statements of operations as financial income or expense.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

As of the date of the issuance, the Company allocated the gross amount received of $1,200 to the par value of the shares issued ($0.12) and to the liability in respect of the warrants issued ($1,200). Issuance expenses in the amount of $63 and finders fee in the amount of $144 were recorded as deferred issuance costs. The amount allocated to the liability was less than the fair value of the warrants at grant date. On May 13, 2005, the Registration Statement became effective and the Company was no longer subject to possible penalties. As such, the liability and the deferred issuance costs related to the agreement has been classified to the Stockholders Equity as Additional Paid in Capital. As of May 13, 2005, the fair value of the liability in respect of the warrants issued was $720 and the amount of the deferred issuance costs was $178.

On November 30, 2006, all the warrants expired unexercised.

i. On March 23, 2005, the Company issued 12,000 shares of common stock and 12,000 options as a bonus to the then Chief Executive Officer, Dr. Shai Meretzki, in connection with the issuance of a Notice of Allowance by the United States Patent Office for patent application number 09/890,401. Salary expenses of $696 were recognized in respect of this bonus based on the quoted market price of the Company s stock and the fair value of the options granted using the Black Scholes valuation model. On November 30, 2006, all the warrants expired unexercised.

j. On February 11, 2004, the Company issued an aggregate amount of 5,000 shares of common stock to a consultant and service provider as compensation for carrying out investor relations activities during the year 2004. Total compensation, measured as the grant date fair market value of the stock, amounted to $800 and was recorded as an operating expense in the statement of operations in the year ended

June 30, 2004.

k. On November 28, 2005, 400 warrants, which were issued to finders as finder fees related to the January 24, 2005 Agreement, were exercised.

l. On January 25, 2006, 50 warrants, which were issued to finders as finder fees related to the January 24, 2005 Agreement, were exercised.

m. Convertible Debenture

On April 3, 2006, the Company issued Senior Secured Convertible Debentures (the Debentures), for gross proceeds of $3,000. In conjunction with this financing, the Company issued 236,976 warrants exercisable for three years at an exercise price of $15 per share. The Company paid a finder s fee of 10% in cash and issued 47,394 warrants exercisable for three years, half of which are exercisable at $15 and half of which are exercisable at $15.4 per share. The Company also issued 5,000 warrants in connection with the separate finder s fee agreement related to the issuance of the debenture exercisable for three years at an exercise price of $15 per share.

1a. Interest accrued on the Debentures at the rate of 7% per annum, was payable semi-annually on June 30 and December 31 of each year and on conversion and at the maturity date. Interest was payable, at the option of the Company, either (1) in cash, or (2) in shares of common stock at the then applicable conversion price. If the Company failed to deliver stock certificates upon the conversion of the Debentures at the specified time and in the specified manner, the Company was required to make substantial payments to the holders of the Debentures.

1b. The warrants, issued as of April 3, 2006, become first exercisable on the 65th day after issuance. Holders of the warrants were entitled to exercise their warrants on a cashless basis following the first anniversary of issuance if the Registration Statement is not in effect at the time of exercise.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

m. Convertible Debenture (Cont.):

In accordance with EITF 00-19, the Company allocated the consideration paid for the convertible debenture and the warrants as follows:

The warrants were recorded as a liability based on their fair value in the amount of $951 at grant date. The Company estimated the fair value of the warrants using a Black-Scholes option pricing model, with the following assumptions: volatility of 83%, risk free interest rate of 4.8%, dividend yield of 0%, and an expected life of 36 months. Changes in the fair value are recorded as interest income or expense, as applicable.

The fair value of the conversion feature of the debentures at grant date, in the amount of $1,951 was recorded as a liability.

The balance of the consideration, in the amount of $97, was allocated to the debentures. The discount in the amount of $2,903 was amortized according to the effective rate interest method over the debentures contractual period (24 months).

The fair value of the warrants issued as a finder s fee and the finder s fee in cash amounted to $535 and were recorded as deferred issuance expenses and are amortized over the Debentures contractual period. The Company estimated the fair value of the warrants using a Black Scholes option pricing model, with the following assumptions: volatility of 83%, risk free interest rate of 4.8%, dividend yield of 0%, and an expected life of 36 months.

According to EITF 00-19, in order to classify warrants and options (other than employee stock options) as equity and not as liabilities, the Company should have sufficient authorized and unissued shares of common stock to provide for settlement of those instruments that may require share settlement. Under the terms of the Debentures, the Company may be required to issue an unlimited number of shares to satisfy the debenture s contractual requirements. As such, on April 3, 2006, the Company s warrants and options (other than employee stock options) were classified as liabilities and measured at fair value with changes recognized currently in earnings.

As of November 9, 2006, all of the Debentures, were converted into 969,815 shares. As a result, an amount of $1,787 was reclassified into common stock and additional paid-in capital as follows: from conversion of the feature embedded in convertible debenture ($1,951), convertible debenture ($202), accrued interest ($74) net of issuance expenses in the amount of $440. In addition, the warrants and options to consultants in the amount of $476 and deferred issuance expenses in the amount of $379 were reclassified as equity.

Pursuant to an investor relations agreement dated April 28, 2006, the Company paid in cash an amount of $440 on October 19, 2006 and issued 50,000 common shares on November 9, 2006 to certain service providers following reaching certain milestones regarding the conversion of the Debentures as agreed to by the parties.

During the year ended June 30, 2007, 186,529 of the warrants which were issued on April 3, 2006, were exercised. 75,692 warrants were exercised into shares in consideration for $1,022 (net of cash exercise costs of $114), and 110,836 warrants were exercised cashless into 46,674 shares. On April 30, 2009, the rest of the warrants expired unexercised.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

n. On May 14, 2007, the Company consummated a private equity placement with a group of investors for an equity investment (May 2007 Agreement). The Company sought a minimum of $7,000 and up to a maximum of $13,500 for shares of the Company s common stock, $.00001 par value at a per share price of $2.50, and warrants to purchase shares at an exercise price of $5 exercisable until five years after the closing date of the agreement.

In May 2007, under the May 2007 Agreement, the Company issued 3,126,177 shares of the Company s common stock and 3,126,177 warrants to purchase the Company s common stock in consideration for $7,751 (net of cash issuance costs of $64).

During July and August 2007, under the May 2007 Agreement, the Company issued additional 273,828 shares of the Company s common stock and 273,828 warrants to purchase the Company s common stock in consideration for $685. The consideration was paid partly prior to the issuance of the shares in the year ended June 30, 2007 ($368) and was recorded as receipts on account of shares and the balance was paid during July and August 2007.

As part of May 2007 Agreement, the Company signed an escrow agreement according to which the Company granted an option to an investor to invest, under the same conditions defined in the May 2007 Agreement, up to $5,000 which will be paid in monthly installments over 10 months starting six months subsequent to the closing date. According to the agreement, in the event that the investor fails to make any of the payments within five days of the payment due date, the option to invest the remaining amount will be cancelled. As a result of this agreement, the Company issued 634,580 shares of the Company s common stock and 634,580 warrants to purchase the Company s common stock in consideration for $1,561 (net of cash issuance costs of $25). As of March 31, 2008 the option was cancelled.

The total proceeds related to the May 2007 Agreement accumulated as of June 30, 2008 were $9,997 (net of cash issuance costs of $89), and 4,034,585 shares and 4,034,585 warrants were issued.

In connection with the May 2007 Agreement, the Company issued 275,320 warrants to finders as finders fee. The warrants are exercisable for five years from the date of grant at an exercise price of $2.50 per share.

During year 2008 and 2007, 1,361,818 and 500,000 warrants related to the May 2007 Agreement were exercised on a cashless basis for 1,009,697 shares of stock and 366,534 shares of stock, respectively.

o. The Company issued 28,398 warrants to the investors related to the May 2007 Agreement as compensation to investors who delivered the invested amount prior to the closing date of the placement. The warrants are exercisable for five years at an exercise price of $2.50 per share. The Company recorded the fair value of the warrants as financial expenses in the amount of $651 in the year ended June 30, 2007. The fair value of these warrants was determined using the Black-Scholes pricing model, assuming a risk free rate of 4.8%, a volatility factor of 128%, dividend yield of 0% and expected life of five years.

p. In the May 2007 Agreement, there is a provision that requires the Company for a period of four years (subject to acceleration under certain circumstances) not to sell any of the Company s common stock for less than $0.0125 per share (pre-split price). The May 2007 Agreement provides that any sale below that price must be preceded by consent from each purchaser in the placement. Since that date, the Company had effected a one-for-200 reverse stock split.

The Company decided to proceed and enter into additional security purchase agreements notwithstanding this provision for the following reasons:

The agreement does not contain any provisions for the adjustment of the specified minimum price in the event of stock splits and the like. If such agreement were to have contained such a provision, the floor price would be $2.50.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

p. (Cont.):

The majority of purchasers in the private placement have sold the stock purchased in the placement, and thus the number of purchasers whose consent is purportedly required has been substantially reduced. The number of shares outstanding as to which this provision currently applies according the information supplied by transfer agent is 1.8 million shares.

An agreement that prevents the Company s Board of Directors from issuing shares that are necessary to finance the Company s business may be unenforceable.

It is unclear what could be the consequences of a court decision that the issuance of shares below $2.50 per share violates the May 2007 Agreement.

In connection therewith, the Company approved the issuance of warrants to purchase up to 147,884 shares of its common stock to each of the investors who was a party to the May 2007 Agreement that held shares purchased pursuant to such agreement, as of August 6, 2008, conditioned on having the investors execute a general release pursuant to which the Company will be released from liability including, but not limited to, any claims, demands, or causes of action arising out of, relating to, or regarding sales of certain equity securities notwithstanding the above mentioned provision. As of June 30, 2009 the Company received a general release from part of the investors, and issued them warrants to purchase 70,368 shares of its common stock.

q. On August 6, 2008, the Company sold 1,391,304 shares of the Company s common stock and warrants to purchase 695,652 shares of common stock at an exercise price of $1.90 to two investors in consideration of $1,600 pursuant to terms of a securities purchase

agreement. The placement agent received a placement fee equal to 6% of the gross purchase price of the Units (excluding any consideration that may be paid in the future upon exercise of the warrants) as well as warrants to purchase 83,478 shares of common stock at an exercise price of $1.44 per share. The warrants will be exercisable after six months from the closing date through and including August 5, 2013. Total cash issuance costs related to this placement amounted to $125.

r. On September 22, 2008, the Company sold 900,000 shares of the Company s common stock and warrants to purchase 675,000 shares of common stock to an investor in consideration for $1,035 pursuant to terms of a securities purchase agreement. The price per share of common stock was $1.15, and the exercise price of the warrants is $1.90. The warrants will be exercisable for a period of five years. As part of this transaction, the Company paid a transaction fee to the finders equal to 6% of the actual purchase price and warrants exercisable for five years at an exercise price of $1.50 per share to purchase 54,000 of the Company s shares of common stock. Total cash issuance costs related to this placement amounted to $62.

s. In November 2008 through January 2009, the Company entered into a securities purchase agreement with investors, pursuant to which the Company sold 1,746,575 shares of its common stock at a price of $0.40 per share, for an aggregate purchase price of $699, and issued warrants to purchase up to an additional 1,746,575 shares of common stock with an exercise price of $1.00 per share. The warrants will be exercisable after six months from the closing date and will expire after five years. Pursuant to the agreement, the investors have the option, by notice to the Company no later than 10 business days following the release of an official announcement by the Company that it is initiating its first human clinical trials, to purchase an additional 931,507 shares of common stock at a purchase price of $0.75 per share, for an aggregate purchase price of $699, and receive therewith warrants to purchase up to an additional 931,507 shares of common stock with an exercise price of $1.50 per share.

The issuance costs include $39 in cash and warrants exercisable for five years at an exercise price of $1.00 per share to purchase 96,579 of the Company s shares of common stock.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

t. On January 20, 2009, the Company sold 216,818 shares of its common stock and warrants to purchase 216,818 shares of common stock to investors in consideration for $95 pursuant to terms of a securities purchase agreement. The price per share of common stock is $0.44, and the exercise price of the warrants is $1.00 per share. The warrants will be exercisable after six months from the closing date and will expire after five years. Pursuant to the agreement, the investors have the option, by notice to the Company no later than 10 business days following the release of an official announcement by the Company that it is initiating its first human clinical trials, to purchase an additional 127,200 shares of common stock at a purchase price of $0.75 per share, for an aggregate purchase price of $95, and receive therewith warrants to purchase up to an additional 127,200 shares of common stock with an exercise price of $1.50 per share (the January 20 Option). The January 20 Option is exercisable within six months from the closing date. As part of this transaction, the Company paid a transaction fee to finders in an amount of $5 in cash and issued them warrants exercisable for two years at an exercise price of $1.00 per share to purchase 12,273 shares of the Company s common stock.

u. On January 29, 2009, the Company entered into a subscription agreement with certain investors, pursuant to which the Company sold to such investors 969,826 units, each unit consisting of one share of common stock and a warrant to purchase one of the Company s share of common stock (Unit). The purchase price per Unit was $1.16 and the aggregate purchase price for the said Units is approximately $1,125. The warrants are exercisable 181 days following the issuance thereof for a period of five years thereafter at an exercise price of $1.90 per share. The Company paid a transaction fee to finders in an amount of $90 in cash and issued them warrants exercisable after six months for five years at an exercise price of $1.90 per share to purchase 80,983 shares of the Company s common stock.

v. On May 5, 2009, the Company entered into securities purchase agreements with two investors pursuant to which the Company sold 888,406 shares of its common stock and warrants to purchase 488,623 shares of common stock in consideration for $1,333. The exercise price of the warrants is $1.96 per share and they will be exercisable for a period of five years commencing six months following the

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issuance thereof. The Company paid a transaction fee to finders in an amount of $104 in cash and issued them warrants exercisable after six months for five years at an exercise price of $1.875 per share to purchase 53,304 shares of the Company s common stock.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

w. The following table summarizes the issuance of shares to the Company s consultants and service providers as compensation for their services since July 1, 2007:

Period of service	Number of shares issued	Fair market value of the shares issued at the issuance date	Expenses in the statements of operations for the year ended june 30,	
			2008	2009
June - December 2007	10,000	149	149	-
February - July 2008	7,500	18	18	-
March - September 2008	3,500	8	6	2
April - June 2008	50,000	102	102	-
July -September 2008	40,000	46	-	46
October 2008	750	1	-	1
October 2008	20,000	12	-	12
December 2008 - November 2009	50,000	24	-	14
July 2008 - June 2009	16,129	10	-	10
February - June 2009	9,510	12	-	12
February - April 2009	30,000	32	-	32
April 2008	3,500	4	-	4
Total	**240,889**	**418**	**275**	**133**

The issuance of shares to the consultants was in some cases in addition to cash compensation the consultants were entitled to.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

x. Options, warrants and restricted stocks to employees, directors and consultants:

The Company has two incentive option plans from 2003 and from 2005. Under these plans, options may be granted to the Company s officers, directors, employees and consultants or the officers, directors, employees and consultants of the Subsidiary.

On August 28, 2008, the Company s Board of Directors approved the reservation of an additional 90,000 shares of common stock for the Amended 2005 Stock Option Plan, so that the total options under the 2005 Option Plan was set at 1,990,000.

At the annual meeting of stockholders of the Company held on January 21, 2009, the Company s stockholders approved the adoption of the Amended and Restated 2005 Stock Option Plan of the Company (the 2005 Plan), amending the Amended 2005 Stock Option Plan in order to: (i) increase the number of shares of common stock authorized for issuance thereunder from 1,990,000 to be equal to 16% of the number of shares of common stock issued and outstanding on a fully diluted basis immediately prior to the grant of securities; (ii) allow the issuance of shares of common stock (Restricted stock) and units for such shares of common stock; and (iii) set the termination date of the 2005 Plan to be December 31, 2018.

Each option granted under the 2005 Plan is exercisable through the expiration date of the 2005 Plan unless stated otherwise. The exercise price of the options granted under the plan may not be less than the nominal value of the stock into which such options are exercised. The options, restricted stock and restricted stock units (the Awards) vest over two years from the date of grant, as follows: 25% vests six months after the date of grant, and the remaining Awards vest monthly, in equal instalments over 18 months unless other vesting schedules are specified. Any Awards that are cancelled or forfeited before expiration become available for future grants.

As of June 30, 2009, the number of Shares authorized for issuance under the 2005 Plan amounted to 4,376,910. 687,996 Shares are still available for future grant under the 2005 Plan as of June 30, 2009. Under the 2003 Plan 10,501 options are still available for future grant.

a. Options to employees and directors:

On August 28, 2008, the Company granted 97,500 options exercisable at a price of $1.04 per share to the Company s employees and directors under the 2005 Plan. The fair value of these options at the grant date was $91.

On January 21, 2009, the Company granted 580,000 options exercisable at a price of $0.62 per share to the Company s employees and directors under the 2005 Plan. The fair value of these options at the grant date was $312.

The Company accounted for its options to employees and directors under the fair value method in accordance with SFAS 123(R). The fair value for these options was estimated using Black-Scholes option-pricing model with the following assumptions: risk-free interest rates of 1.80% 3.26%, expected dividend yield of 0%, expected volatility of 129% 1.32%, a weighted-average contractual life of the options of up to six years, and a forfeiture rate of 5% per grant.

U.S. Dollars in thousands (except per share amounts)

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

x. Options, warrants and restricted stock to employees,directors and consultants (cont.):

a. Options to employees and directors (cont.):

A summary of the Company s share option activity for options granted to employees and directors under the 2005 Plan and the 2003 Plan (the Plans) is as follows:

	Year ended June 30, 2009			
	Number	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms (in years)	Aggregate Intrinsic Value Price
Options outstanding at beginning of year	1,714,181	$ 4.93		
Options granted	677,500	0.68		
Options forfeited	(25,575)	4.10		
Options outstanding at end of the period	2,366,106	$ 3.72	7.88	$ 466
Options exercisable at the end of the period	1,792,386	$ 4.46	7.47	$ 140
Options vested and expected to vest	2,337,420	$ 3.75	7.86	$ 450

	Year ended June 30, 2008			
	Number	Weighted Average Exercise Price	Weighted average remaining contractual terms (in years)	Aggregate intrinsic value price
Options outstanding at beginning of year	1,260,215	$ 5		
Options granted	508,750	5		
Options forfeited	(54,784)	8.87		
Options outstanding at end of the period	1,714,181	$ 4.93	8.57	$ -
Options exercisable at the end of the period	1,017,154	$ 4.72	8.26	$ -

U.S. Dollars in thousands (except per share amounts)

	Year ended June 30, 2008			
Options vested and expected to vest	1,679,330	$ 4.92	8.56	$ -

Intrinsic value of exercisable options (the difference between the Company s closing stock price on the last trading day in the period and the exercise price, multiplied by the number of in-the-money options) represents the amount that would have been received by the employees and directors option holders had all option holders exercised their options on June 30, 2009. This amount changes based on the fair market value of the Company s stock.

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

x. Options, warrants and restricted stock to employees, directors and consultants (cont.):

a. Options to employees and directors (cont.):

Compensation expenses related to options granted to employees and directors were recorded to research and development expenses and general and administrative expenses, as follows:

	Year ended June 30,		Period from inception through June 30,
	2009	2008	2009
Research and development expenses	$ 371	$ 1,433	$ 2,507
General and administrative expenses	944	2,771	5,398
	$ 1,315	$ 4,204	$ 7,905

(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

x. Options, warrants and restricted stocks to employees,directors and consultants (cont.):

b. Options and warrants to non-employees:

On September 1, 2008, the Company entered into a consulting agreement. Pursuant to the agreement the Company granted the consultant fully vested warrants to purchase 15,000 shares of the Company s common stock effective upon signing the consulting agreement. The warrants were not granted under the Company s options plans. According to the agreement, additional warrants to purchase 35,000 shares of the Company s common stock will be granted subject to a service condition. As of June 30, 2009, the Company assumes that the service condition of this grant will not be achieved and the warrants will not be granted. The Company did not record any expenses related to the service based warrants. All warrants are exercisable for five years at an exercise price of $1.91 per share.

The fair value of the 15,000 warrants was $13. The Company accounted for its options to consultants under the fair value method in accordance of SFAS 123(R) and EITF 96-18 Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services . The fair value for these options was estimated using Black-Scholes option-pricing model with the following assumptions: risk-free interest rates of 3.10%, expected dividend yield of 0%, expected volatility of 129%, and a weighted-average contractual life of the options of five years.

On January 21, 2009, the Company granted 10,000 options exercisable at a price of $0.62 per share to a Company consultant under the 2005 Plan. The fair value of these options at the grant date was $6. The fair value was estimated using Black-Scholes option-pricing model with the following assumptions: risk-free interest rates of 2.56%, expected dividend yield of 0%, expected volatility of 132%, and a weighted-average contractual life of the options of 10 years.

On April 26, 2009, the Company granted 100,000 options exercisable at a price of $1.34 per share to a Company consultant. The options vest in twelve equal monthly installments of 8,333 shares. The fair value of these options at the grant date was $120. The fair value was estimated using Black-Scholes option-pricing model with the following assumptions: risk-free interest rates of 1.87%, expected dividend yield of 0%, expected volatility of 144%, and a contractual life of the options of five years.

A summary of the Company s activity related to options and warrants to consultants is as follows:

	Year ended June 30,2009			
	Number	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms (in years)	Aggregate Intrinsic Value Price
Options and warrants outstanding at beginning of year	212,000	$ 7.92		
Options and warrants granted	125,000	1.35		
Options and warrants forfeited	(1,000)	8.30		
Options and warrants outstanding at end of the period	336,000	$ 5.48	5.53	$ 11
Options and warrants exercisable at the end of the period	232,667	$ 7.22	5.45	$ 3

	Year ended June 30,2009			
Options and warrants vested and expected to vest	336,000	$ 5.48	5.53	$ 11

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

x. Options, warrants and restricted stock to employees, directors and consultants (cont.):

b. Options and warrants to non-employees (cont.):

	Year ended June 30, 2008			
	Number	Weighted Average Exercise Price	Weighted average remaining contractual terms (in years)	Aggregate intrinsic value price
Options outstanding at beginning of year	164,596	$ 10.8		
Options granted	60,000	3.13		
Options forfeited	(12,596)	22.92		
Options outstanding at end of the period	212,000	$ 7.92	6.7	$ -
Options exercisable at the end of the period	142,458	$ 7.56	5.49	$ -
Options vested and expected to vest	212,000	$ 7.92	6.7	$ -

Compensation expenses related to options and warrants granted to consultants were recorded as follows:

	Year ended June 30,	Period from inception through June 30,

	Year ended June 30,		Period from inception through June 30,
	2009	2008	2009
Research and development expenses	$ 7	$ 172	$ 1,516
General and administrative expenses	90	389	730
	$ 97	$ 561	$ 2,246

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

x. Options, warrants and restricted stock to employees, directors and consultants (cont.):

c. Restricted stock to employees and directors:

In December 2008, the Company issued a total of 427,228 shares of its common stock to its directors and employees at a price of $0.40 per share. The issuance was made in exchange for a voluntary reduction, for six months, in the cash compensation payable to such directors and employees. These shares were not granted under the Company s options plans.

On February 12, 2009, the Company granted 852,500 shares of restricted stock to the Company s employees and directors under the 2005 Plan. The fair value of these shares at the grant date was $964.

On May 11, 2009, the Company granted 159,671 shares of restricted stock to the Company s employees and directors under the 2005 Plan. The shares were issued in exchange for a voluntary reduction of one year in the cash compensation such directors and employees were entitled to. The fair value of these shares at the grant date was $200.

A summary of the Company s restricted stock granted to employees and directors is as follows:

	Year ended June 30, 2009	
	Number	Aggregate Intrinsic Value Price
Restricted stock outstanding at beginning of year	-	
Restricted stock granted	1,439,399	

U.S. Dollars in thousands (except per share amounts)

	Year ended June 30, 2009	
Restricted stock forfeited	-	
Restricted stock outstanding at end of the period	1,439,399	$ 1,972
Restricted stock vested at the end of the period	427,228	$ 585
Restricted stock vested and expected to vest	1,388,790	$ 1,903

Compensation expenses related to restricted stock granted to employees and directors were recorded to research and development expenses and general and administrative expenses, as follows:

	Year ended June 30,		Period from inception through June 30,
	2009	2008	2009
Research and development expenses	$ 250	$ -	$ 250
General and administrative expenses	392	-	392
	$ 642	$ -	$ 642

NOTE 8: SHARE CAPITAL AND STOCK OPTIONS (CONT.)

x. Options, warrants and restricted stock to employees, directors and consultants (cont.):

d. Restricted stock to consultants:

In December 2008, the Company issued 23,625 shares of its common stock to its consultant. The issuance was made in exchange for a voluntary reduction for six months in the cash compensation such consultant was entitled to. These shares were not granted under the Company s options plans.

On February 12, 2009, the Company granted 45,000 shares of restricted stock to Company consultants under the 2005 Plan. The fair value of these shares at the grant date was $54.

On May 11, 2009, the Company granted 4,636 shares of restricted stock to a Company consultant under the 2005 Plan. The fair value of these shares at the grant date was $6.

A summary of the Company s restricted stock granted to consultants is as follows:

	Year ended June 30, 2009	
	Number	Aggregate Intrinsic Value Price
Restricted stock outstanding at beginning of year	-	
Restricted stock granted	73,261	
Restricted stock forfeited	-	
Restricted stock outstanding at end of the period	73,261	$ 100
Restricted stock vested at the end of the period	23,625	$ 32
Restricted stock vested and expected to vest	73,261	$ 100

Compensation expenses related to restricted stock granted to consultants were recorded to research and development expenses and general and administrative expenses, as follows:

	Year ended June 30,		Period from inception through June 30,
	2009	2008	2009
Research and development expenses	$ 52	$ -	$ 52
General and administrative expenses	-	-	-
	$ 52	$ -	$ 52

U.S. Dollars in thousands (except per share amounts)

y. Summary of warrants and options:

A summary of all the warrants and options outstanding as of June 30, 2009 is presented in this table:

Warrants / Options	Exercise Price per Share	Options and Warrants for Common Stock	Options and Warrants Exercisable	Weighted Average Remaining Contractual Terms
Warrants:	$ 0.75	1,058,708	-	0.06
	$ 1.00	2,072,245	1,855,427	4.40
	$ 1.30 - $ 1.50	1,196,185	137,478	4.99
	$ 1.80 - $ 2.00	3,126,272	1,533,536	4.48
	$ 2.50	131,898	131,898	2.16
	$ 4.40	3,750	3,750	1.30
	$ 5.00	2,394,585	2,394,585	2.99
Total warrants		**9,983,643**	**6,056,674**	
Options:	$ 0.62	590,000	172,094	9.33
	$ 1.04	93,750	39,815	9.07
	$ 1.34	100,000	16,667	4.91
	$ 2.97	20,000	10,833	8.86
	$ 3.50	1,021,491	1,021,491	7.03
	$ 3.72 - $ 3.80	36,116	36,116	6.78
	$ 4.00	42,500	42,500	7.30
	$ 4.38 - $ 4.40	486,623	384,767	7.86
	$ 6.80	36,250	28,706	8.37
	$ 8.20	48,547	45,235	7.15
	$ 20.00	158,079	158,079	7.21
Total options		**2,633,356**	**1,956,303**	
Total warrants and options		**12,616,999**	**8,012,977**	

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 9: FINANCIAL EXPENSES (INCOME), NET

	Year ended June 30,			Period from May 11, 2001 (Inception) through June 30, 2009
	2009	2008	2007	
Foreign currency translation differences	$ 69	$ (150)	$ 17	$ (40)
Interest on short-term bank credit and bank's expenses	5	13	14	51
Interest on long-term loan	3	3	-	6
Interest accrued on know-how licenses	-	-	4	69
Interest income on deposits	(14)	(25)	(39)	(150)
Deferred issuance expenses amortization	-	-	168	604
Discount amortization	-	-	88	105
Interest expenses of debenture	-	-	23	74
Change in fair value of warrants	-	-	(716)	(2,696)
Loss (income) related to marketable securities	66	214	(33)	247
Interest expenses related to warrants issued to investors	-	-	651	651
Expenses (income) of derivatives	(51)	14	14	(23)
	$ 78	$ 69	$ 191	$ (1,102)

PLURISTEM THERAPEUTICS INC. AND ITS SUBSIDIARY
(A Development Stage Company)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 10: TAXES ON INCOME

A. Tax laws applicable to the companies:

1. The Company is taxed under U.S. tax laws.

2. The Subsidiary is taxed under the Israeli income Tax Ordinance and the Income Tax (Inflationary Adjustments) Law, 1985: (the law).

Results of the Company s Subsidiary for tax purposes are measured and reflected in real terms in accordance with the changes in the CPI. As explained in Note 2, the financial statements are presented in U.S. dollars. The difference between the rate of change in Israeli CPI and the rate of change in the NIS/U.S. dollar exchange rate causes a difference between taxable income or loss and the income or loss before taxes reflected in the financial statements. In accordance with paragraph 9(f) of SFAS 109, the Company has not provided deferred income taxes on this difference between the reporting currency and the tax bases of assets and liabilities.

On February 26, 2008, the Israeli Parliament (the Knesset) enacted the Income Tax Law (Inflationary Adjustments) (Amendment No. 20) (Restriction of Effective Period), 2008, which the Company refers to as the Inflationary Adjustments Amendment. In accordance with the Inflationary Adjustments Amendment, the effective period of the Inflationary Adjustments Law will cease at the end of the 2007 tax year and as of the 2008 tax year the provisions of the law shall no longer apply, other than the transitional provisions intended at preventing distortions in the tax calculations. In accordance with the Inflationary Adjustments Amendment, commencing the 2008 tax year, income for tax purposes will no longer be adjusted to a real (net of inflation) measurement basis. Furthermore, the depreciation of inflation immune assets and carried forward tax losses will no longer be linked to the Israeli consumer price index.

B. Tax assessments:

The Company and the Subsidiary have not received final tax assessments since its incorporation.

C. Tax rates applicable to the Group:

1. The Subsidiary

In June 2004, an amendment to the Income Tax Ordinance (No. 140 and Temporary Provision), 2004 was passed by the Knesset (Israeli parliament) and on July 25, 2005, another law was passed, the amendment to the Income Tax Ordinance (No. 147) 2005, according to which the corporate tax rate is to be progressively reduced to the following tax rates: 2006 31%, 2007 29%, 2008 27%, 2009 26%, 2010 and thereafter 25%.

The above amendment did not have an effect on the Subsidiary s financial position and results of operations.

Israeli companies are generally subject to capital gains tax at rate of 25% for capital gains (other than gains deriving from the sale of listed securities) derived after January 1, 2003.

NOTE 10: TAXES ON INCOME (CONT.)

2. The Company:

The tax rates applicable to the Company whose place of incorporation is the U.S. are corporate (progressive) tax at the rate of up to 35%, excluding State tax and Local tax if any, which rates depend on the state-and city in which the Company will conduct its business.

According to the tax laws applicable to Israeli residents, dividend received from a foreign resident company is subject to tax in Israel at the rate of 25% in the hands of its recipient. According to the tax laws applicable in the U.S., tax at the rate of 30% is withheld and, based on the treaty for the avoidance of double taxation of Israel and the U.S., it may be reduced to either 25% or 12.5% (dependent on the identity of the shareholder). To enjoy the benefits of the tax treaty, certain procedural requirements need to be satisfied.

D. Carryforward losses for tax purposes

As of June 30, 2009, the Company had U.S. federal net operating loss carryforward for income tax purposes in the amount of approximately $9,405. Net operating loss carryforward arising in taxable years beginning after August 6, 1997 can be carried forward and offset against taxable income for 20 years and expiring between 2022 and 2028.

Utilization of U.S. net operating losses may be subject to substantial annual limitations due to the change in ownership provisions of the Internal Revenue Code of 1986 and similar state provisions. The annual limitation may result in the expiration of net operating losses before utilization.

The Company s Subsidiary in Israel has accumulated losses for tax purposes as of June 30, 2009, in the amount of approximately $8,286, which may be carried forward and offset against taxable income and capital gain in the future for an indefinite period.

Deferred income taxes:

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company s deferred tax assets are as follows:

	June 30,	
	2008	2009
Deferred tax assets:		
U.S. net operating loss carryforward	$ 2,898	$ 3,292
Israeli net operating loss carryforward	1,716	2,071
Allowances and reserves	38	51
Total deferred tax assets before valuation allowance	4,652	5,414
Valuation allowance	(4,652)	(5,414)
Net deferred tax asset	$ -	$ -

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

U.S. Dollars in thousands (except per share amounts)

NOTE 10: TAXES ON INCOME (CONT.)

As of June 30, 2009, the Company and its Subsidiary have provided valuation allowances in respect of deferred tax assets resulting from tax loss carryforward and other temporary differences, since they have a history of operating losses and current uncertainty concerning its ability to realize these deferred tax assets in the future. Management currently believes that it is more likely than not that the deferred tax regarding the loss carryforward and other temporary differences will not be realized in the foreseeable future.

Reconciliation of the theoretical tax expense (benefit) to the actual tax expense (benefit):

In 2007, 2008 and 2009, the main reconciling item of the statutory tax rate of the Company and its Subsidiary (29% to 35% in 2007, 27% to 35% in 2008 and 26% to 35% in 2009) to the effective tax rate (0%) is tax loss carryforwards and other deferred tax assets for which a full valuation allowance was provided.

NOTE 11: SUBSEQUENT EVENTS

On July 7, 2009, the Company announced that the first patient has been enrolled in a Phase I clinical trial of its PLX-PAD product.

Certain investors had an option, by giving the Company notice no later than 10 business days following the release of an official announcement by the Company that it initiated its first human clinical trials, to purchase additional shares and warrants. Following receipt of such investors notice, the Company issued in July 2009 1,058,708 shares of common stock at a purchase price of $0.75 per share, for an aggregate purchase price of $794, and warrants to purchase up to an additional 1,058,708 shares of common stock with an exercise price of $1.50 per share.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

None.

Item 9A(T). Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We conducted an evaluation under the supervision of the Chief Executive Officer and Chief Financial Officer (its principal executive officer and principal financial officer, respectively), regarding the effectiveness of the Company s disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act) as of June 30, 2009. Based on the aforementioned evaluation, management has concluded that our disclosure controls and procedures were effective as of June 30, 2009.

Management s Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting has been 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 generally accepted in the United States of America.

Our internal control over financial reporting includes policies and procedures that pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect transactions and dispositions of our assets; provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America, and that receipts and expenditures are being made only in accordance with authorization of our management and directors; and provide reasonable

assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of our internal control over financial reporting at June 30, 2009. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control Integrated Framework*. Based on that assessment under those criteria, management has determined that, at June 30, 2009, our internal control over financial reporting was effective.

This annual 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 the Company s registered public accounting firm pursuant to temporary rules of the SEC that permit us to provide only management s report in this annual report.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fourth quarter of fiscal year 2009 that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

As of June 30, 2009, our directors and executive officers, their ages, positions held, and duration of such, are as follows:

Name	Position Held With Company	Age	Date First Elected or Appointed
Zami Aberman	Chief Executive Officer, President, Director and Chairman of the Board of Directors	55	September 26, 2005 November 21, 2005 April 3, 2006
Yaky Yanay	Chief Financial Officer, Secretary	38	November 1, 2006
Nachum Rosman	Director	63	October 9, 2007
Doron Shorrer	Director	56	October 2, 2003
Hava Meretzki	Director	40	October 2, 2003
Isaac Braun	Director	56	July 6, 2005
Israel Ben-Yoram	Director	48	January 26, 2005
Mark Germain	Director	59	May 17, 2007
Shai Pines	Director	55	December 8, 2008

Business Experience

The following is a brief account of the education and business experience of each director and executive officer during at least the past five years, indicating each person s principal occupation during the period, and the name and principal business of the organization by which they were employed.

Zami Aberman

Mr. Aberman became our Chief Executive Officer and President in September 2005 and a director of our Company in November 2005. Mr. Aberman has served as our Chairman of the Board since April 2006, and between May 2007 and February 2009 he was Co-chairman with Mr. Mark Germain. He has 20 years of experience in marketing and management in the hi-tech industry. He held Chief Executive and Chairman positions in companies in Israel, the United States, Europe, Japan and Korea. Mr. Aberman operated within high-tech global companies in the fields of automatic optical inspection, network security, video over IP, software, chip design and robotic markets. Mr. Aberman serves as the chairman of Rose Hitech Ltd., a private investment company; as the chairman of VLScom Ltd., a private company specializing in video compression for HDTV and video over IP and as a director of Ori Software Ltd., a private company engaged in data management. Before serving in those positions he served, between 2002 and 2005, as the President and CEO of Elbit Vision Systems, a public company traded on the OTCBB market (EVSNF.OB) which supplies inspection systems for the microelectronic industry.

In 1992, Mr. Aberman was awarded the Rothschild Prize for excellence in his field from the President of the State of Israel. Mr. Aberman holds a B.Sc. in Mechanical Engineering from Ben Gurion University in Israel.

Yaky Yanay

Mr. Yanay was appointed as our Chief Financial Officer and Secretary on November 1, 2006.
Prior to joining us, Mr. Yanay was the Chief Financial Officer of Elbit Vision System Ltd. (EVSNF.OB), a company engaged in automatic optical inspection. Mr. Yanay holds a bachelor s degree with honors in business administration and accounting from the college of management studies in Rishon Le Zion, Israel and is a Certified Public Accountant in Israel.

Nachum Rosman

Mr. Rosman became a director of our company in October, 2007. In 1999, Mr. Rosman founded Talecity Ltd., a movie production company, and has since been serving as its Chief Financial Officer. In addition he provides management and consulting services to startup companies in the financial, organizational and human resource aspects of their operations. Mr. Rosman also serves as a director at several privately held companies. Throughout his career, Mr. Rosman held Chief Executive and Chief Financial Officer positions in Israel, the United States and England. In these positions he was responsible, among other things, for finance management, fund raising, acquisitions and technology sales.

Mr. Rosman holds a B.Sc. in Management Engineering and an M.Sc. in Operations Research from the Technion, Haifa, Israel. Mr. Rosman also participated in a Ph.D. program in Investments and Financing at the Tel Aviv University, Israel.

Doron Shorrer

Mr. Shorrer became a director of our company in October, 2003. Between 2002 and 2004 he was Chairman of the Boards of Phoenix Insurance Company, one of the largest insurance companies in Israel, and of Mivtachim Pension Benefit Group, the largest pension fund in Israel. Prior to serving in these positions, Mr. Shorrer held senior positions that included Arbitrator at the Claims Resolution Tribunal for Dormant Accounts in Switzerland; Economic and Financial Advisor, Commissioner of Insurance and Capital Markets for the State of Israel; Member of the board of directors of Nechasim of the State of Israel; Member Committee for the Examination of Structural Changes in the Capital Market (The Brodet Committee); General Director of the Ministry of Transport; Co-Founder and director of an accounting firm with offices in Jerusalem, Tel-Aviv and Haifa; Member of the Lecture Staff of the Amal School Chain; Chairman of a Public Committee for Telecommunications; and Economic Consultant to the Ministry of Energy. Among many areas of expertise, Mr. Shorrer formulates, implements and administers business planning in the private and institutional sector in addition to consulting on economic, accounting and taxation issues to a large audience ranging from private concerns to government ministries.

Mr. Shorrer holds a B.A. in Economics and Accounting and an M.A. in Business Administration (specialization in finance and banking) from the Hebrew University of Jerusalem and is a Certified Public Accountant (ISR).

Hava Meretzki

Ms. Meretzki became a director of our company in October, 2003. Ms. Meretzki is an attorney and is a partner in the law firm of Meretzki - Tavor in Haifa, Israel. Ms. Meretzki specializes in civil, trade and labor law and is presently Vice-Chairman for the National Council of the Israel Bar Association. Recently Ms. Meretzki was nominated to be a member of the committee that nominates legal advisers for Israeli governmental companies.

Ms. Meretzki received a Bachelors Degree in Law from the Hebrew University in 1991 and was admitted to the Israel Bar Association in 1993.

Isaac Braun

Mr. Braun became a director of our company in July, 2005. Mr. Braun is a business veteran with entrepreneurial, industrial and manufacturing experience. He is a co-founder and has been a board member of several hi-tech start-ups in the areas of e-commerce, security, messaging, search engines and biotechnology. Mr. Braun is involved with advising private companies on raising financing and business development.

Israel Ben-Yoram

Mr. Ben-Yoram became a director of our company in January, 2005. He has been a director and partner in the accounting firm of Mor, Ben-Yoram and Partners in Israel since 1985. In addition, since 1992, Mr. Ben-Yoram has been a shareholder and has served as the head director of Mor, Ben-Yoram Ltd., a private company in Israel in parallel to the operation of Mor, Ben-Yoram and Partners. This company provides management services, economic consulting services and other professional services to businesses.

Mr. Ben-Yoram received a B.A. in accounting from the University of Tel Aviv, an M.A. in Economics from the Hebrew University of Jerusalem, an LLB and an MBA from Tel Aviv University and an LLM from Bar Ilan University.

Mark Germain

Mr. Germain became a director of our company in May 2007. Between May 2007 and February 2009, Mr. Germain served as Co-Chairman of our Board. For more than five years, Mr. Germain has been a merchant banker serving primarily the biotech and life sciences industries. He has been involved as a founder, director, Chairman of the Board of, and/or investor in, over twenty companies in the biotech field, and assisted many of them in arranging corporate partnerships, acquiring technology, entering into mergers and acquisitions, and executing financings and going public transactions. He graduated from New York University School of Law in 1975, Order of the Coif, and was a partner in a New York law firm practicing corporate and securities law before leaving in 1986. Since then, and until he entered the biotech field in 1991, he served in senior executive capacities, including as president of a public company sold in 1991. In addition to being Co-Chairman of the Company, Mr. Germain is a director of the following publicly traded companies: Stem Cell Innovations, Inc., ChromaDex, Inc., Omnimmune Corp. and Collexis Holdings, Inc. He is also a co-founder and director of a number of private companies in the biotechnology field.

Shai Pines

Mr. Pines became a director of our company in December, 2008. Mr. Pines is a lawyer admitted to practice law in the State of Israel since 1981. He is a partner with, and heads the Commercial and International Transactions Department of, the Israeli law firm of Hamburger Evron & Co. Since 2000 Mr. Pines served as a member of the Supervisory Board of Globe Trade Centre SA (GTC), a Polish company, which is traded on the Warsaw Stock Exchange, and from 2000 to 2005 as a member of the Supervisory Board of GTC International BV, a Dutch private company. Mr. Pines is also a member of the Board of Governors of the Law Faculty of the Tel-Aviv University since 2006. Mr. Pines holds an MBA degree from Kellogg School of Management, Northwestern University, & the Leon Recanati Graduate School of Business Administration, Tel-Aviv University and an LL.B. degree from Tel-Aviv University.

There are no family relationships between any of the directors or officers named above.

Audit Committee and Audit Committee Financial Expert

The members of our Audit Committee are Doron Shorrer, Nachum Rosman and Israel Ben-Yoram. Doron Shorrer is the Chairman of the Audit Committee, and our Board of Directors has determined that Israel Ben-Yoram is an Audit Committee financial expert and that all members of the Audit Committee are independent as defined by the rules of the SEC and the NASDAQ rules and regulations. The Audit Committee operates under a charter that was approved by our Board on August 29, 2007. The charter is posted on our website at www.pluristem.com. The information on our website is not incorporated by reference into this Annual Report. The primary responsibilities of our Audit Committee include:

- Appointing, compensating and retaining our registered independent public accounting firm;
- Overseeing the work performed by any outside accounting firm;
- Assisting the Board in fulfilling its responsibilities by reviewing: (i) the financial reports provided by us to the SEC, our stockholders or to the general public, and (ii) our internal financial and accounting controls; and
- Recommending, establishing and monitoring procedures designed to improve the quality and reliability of the disclosure of our financial condition and results of operations.

Our Audit Committee held six meetings during fiscal 2009.

Other Committees of the Board

Compensation Committee

The members of our Compensation Committee are Doron Shorrer, Nachum Rosman and Israel Ben-Yoram. The Board has determined that all of the members of the Compensation Committee are independent as defined by the rules of the SEC and NASDAQ rules and regulations. The Compensation Committee operates under a written charter that was approved by our Board on August 29, 2007. The charter is posted on our website at www.pluristem.com. The primary responsibilities of our Compensation Committee include:

- Reviewing, negotiating and approving, or recommending for approval by our Board of the salaries and incentive compensation of our executive officers;
- Administering our equity based plans and making recommendations to our Board with respect to our incentive compensation plans and equity based plans; and
- Periodically reviewing and making recommendations to our Board with respect to director compensation.

Our Compensation Committee held two meetings during fiscal 2009.
Nominating/Corporate Governance; Director Candidates.

The Company does not have a Nominating Committee or Corporate Governance Committee or any committees of a similar nature, nor any charter governing the nomination process. Our Board does not believe that such committees are needed for a company our size. However, our independent directors will consider stockholder suggestions for additions to our Board.

Code of Ethics

Effective August 29, 2008, our Board of Directors adopted a Code of Business Conduct and Ethics that applies to, among other persons, members of our Board of Directors, our officers including our Chief Executive Officer (being our principal executive officer) and our Chief Financial Officer (being our principal financial and accounting officer), contractors, consultants and advisors.

Our Code of Business Conduct and Ethics is filed with the SEC as an exhibit to our annual report on Form 10-KSB filed on September 23, 2005. We will provide a copy of the Code of Business Conduct and Ethics to any person without charge, upon request. Requests can be sent to: Pluristem Therapeutics Inc., MATAM Advanced Technology Park, Building No. 20, Haifa 31905, Israel.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Securities Exchange Act requires our executive officers and directors, and persons who own more than 10% of our common stock, to file reports regarding ownership of, and transactions in, our securities with the SEC and to provide us with copies of those filings. Based solely on our review of the copies of such forms received by us, or written representations from certain reporting persons, we believe that during fiscal year ended June 30, 2009, all filing requirements applicable to its officers, directors and ten percent beneficial owners were complied with.

Item 11. Executive Compensation.

The following table shows the particulars of compensation paid to the following persons, where applicable, for the year ended June 30, 2009, chief executive officer and chief financial officer. We do not currently have any other executive officers, nor did we during the year ended June 30, 2009.

SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary ($) (1)	Stock-based Awards ($)(2)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
Zami Aberman	2009	247,918(3)	332,380	0	0	580,298
Chief Executive Officer	2008	312,565(3)	412,051	41,287(6)	0	765,903
Yaky Yanay	2009	140,974	159,057	0	19,220(5)	319,251
Chief Financial Officer (4)	2008	168,475	245,268	28,945(6)	21,982(5)	464,670

(1) Salary payments which were in New Israeli Shekel, or NIS, were translated into US$ at the then current exchange rate for each payment.

(2) The dollar value recognized for the stock-based awards was determined in accordance with SFAS No. 123(R). Assumptions used in the calculations for these amounts are included in Note 2(i) to our consolidated financial statements for fiscal 2009 included elsewhere in this Annual Report on Form 10-K.

(3) Includes $16,757, and $15,463 paid to Mr. Aberman as compensation for services as a director in 2009 and 2008, respectively.

(4) On November 10, 2008, Mr. Yanay received 1,600 warrants in connection with participating in an equity investment in the company in May 2007. The warrants vested immediately, exercisable at $1.90 per share for two years. Such securities are not reflected in the table above.

(5) Represents cost to us in connection with the car made available to Mr. Yanay. The company also pays the tax associated with this benefit which is part of the amount in the Salary column in the table above.

(6) Consists of amounts paid pursuant to agreements relating to completed financing transactions.

We have the following written agreements and other arrangements concerning compensation with our executive officers:

(a) A consulting agreement, or the Consulting Agreement, dated September 26, 2005, with Zami Aberman, under which Mr. Aberman received a consulting fee of $13,000 per month in NIS, at the then current exchange rate. On September 18, 2006, the Board amended the Consulting Agreement by increasing the monthly consulting fee to an amount of NIS that equals $15,000 effective as of September 2006. The U.S. dollar rate will be not less then 4.35 NIS per $. We further agreed to pay Mr. Aberman up to two percent (2%) of any financings we conducted.

On March 11, 2007, the Board approved an amendment to the Consulting Agreement as follows: Mr. Aberman s engagement with us will not be for less than three (3) years, and his bonus plan has been amended so instead of two percent (2%) bonus of amounts raised by us through investments, debentures, loans or otherwise, Mr. Aberman will be entitled to one and a half percent (1.5%) from amounts received by us from non diluting funding and strategic deals.

On August 29, 2007, the Board approved that Mr. Aberman s monthly consulting fee shall be $20,000, starting in August 2007, and that upon receipt of a clinical trial approval, the monthly consulting fee will be increased to $25,000. As of July 2009, and upon initiation of our clinical trial, Mr. Aberman s compensation increased to $25,000 (before the voluntary reduction discussed below). In addition, Mr. Aberman is entitled once a year to receive an additional amount that equals the monthly consulting fee. All amounts above are paid plus value added tax.

During November 2008 until April 2009, Mr. Aberman participated in a voluntary reduction of 25% of the monthly consulting fee he was entitled to receive, and a full reduction of the annual additional amount that equals the monthly consulting fee, in exchange for issuance of 133,036 shares of our common stock. Starting May 2009, Mr. Aberman agreed to participate in another voluntary reduction of 15%, which will last 12 months, in exchange for 35,500 shares of our common stock.

(b) An agreement with Yaky Yanay, dated November 1, 2006, under which Mr. Yanay is paid 35,500 NIS per month. In addition, Mr. Yanay is entitled once a year to receive an additional amount that equals his monthly salary. Mr. Yanay is provided with a cellular phone and a company car pursuant to the terms of his agreement. We have agreed to pay Mr. Yanay up to 1.4% bonus of any financings we conduct. We subsequently amended this bonus arrangement and accordingly the bonus to which Mr. Yanay is entitled is 1.4% from amounts received by us from non diluting funding and strategic deals.

During November 2008 until April 2009, Mr. Yanay participated in a voluntary reduction of 25% on the monthly consulting fee he was due to receive, in exchange for the issuance of 45,000 shares of our common stock. Starting May 2009, Mr. Yanay agreed to participate in another voluntary reduction of 15%, which will last 12 months on his monthly salary and a full reduction of his annual additional amount that equals his monthly salary, in exchange for 21,300 shares of common stock.

We have no plans or arrangements in respect of remuneration received or that may be received by our executive officers to compensate such officers in the event of termination of employment (as a result of resignation, retirement, change of control) or a change of responsibilities following a change of control, except for the following: (i) options issued to Mr. Aberman fully vest upon a change of control, and in the event of termination of the Consulting Agreement, he will be entitled to 50% acceleration of all of his unvested options and to receive an adjustment fee that equals the monthly consulting fees multiplied by 3 plus the number of years the Consulting Agreement is in force from the second year, but in any event no more than nine years in the aggregate; and (ii) Mr. Yanay may be entitled, under Israeli law and practice, to a severance payment that equals a month s salary for each twelve-month period of employment with the company.

Pension, Retirement or Similar Benefit Plans

There are no arrangements or plans in which we provide pension, retirement or similar benefits for directors or executive officers. Our directors and executive officers may receive stock options or restricted shares at the discretion of our Board in the future.

Outstanding Equity Awards at the End of Fiscal 2009

The following table presents the outstanding equity awards held as of June 30, 2009 by our executive officers:

	Number of Securities Underlying Unexercised					
	Option Awards				Stock Awards	
Name	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price($)	Option expiration date	Number of shares that have not vested (#)	Market value of shares that have not vested ($)
Zami Aberman	22,500		4.40	1/16/2016		
	30,000		4.00	10/30/2016		
	250,000		3.50	1/23/2017		
	78,750	26,250(1)	4.38	12/25/2017		
	36,668	73,332(2)	0.62	10/30/2018		
					140,000(5)	$ 191,800
					38,700(6)	$ 53,019
Yaky Yanay*	46,876	15,624(3)	4.38	12/25/2017		
	12,500		4.00	9/17/2016		
	50,000		3.50	1/23/2017		
	18,334	36,666(4)	0.62	10/30/2018		
					70,000(7)	$ 95,900
					21,300(8)	$ 29,181

*The above securities do not include warrants received from participation in equity investments.

(1) Options to purchase 26,250 shares will vest in 6 installments of 4,375 shares on July 26, 2009, August 26, 2009, September 26, 2009, October 26, 2009, November 26, 2009 and December 26, 2009.

(2) Options to purchase 73,332 shares will vest in 7 installments of 4,584 shares on July 30, 2009, August 30, 2009, September 30, 2009, October 30, 2009, November 30, 2009, December 30, 2009 and January 30, 2010, and 6 installments of 4,583 shares on February 28, 2010, March 30, 2010, April 30, 2010, May 30, 2010, June 30, 2010 and July 30, 2010, and 3 installments of 4,582 shares on August 30, 2010, September 30, 2010 and October 30, 2010.

(3) Options to purchase 15,624 shares will vest in 6 installments of 2,604 shares on July 26, 2009, August 26, 2009, September 26, 2009, October 26, 2009, November 26, 2009 and December 26, 2009.

(4) Options to purchase 36,666 shares will vest in 10 installments of 2,292 shares on July 30, 2009, August 30, 2009, September 30, 2009, October 30, 2009, November 30, 2009, December 30, 2009, January 30, 2010, February 28, 2010, March 30, 2010 and April 30, 2010, and 6 installments of 2,291 shares on May 30, 2010, June 30, 2010 and July 30, 2010, August 30, 2010, September 30, 2010 and October 30, 2010.

(5) 140,000 restricted shares that will vest in one installment of 35,000 shares on August 12, 2009, 6 installments of 5,834 shares on September 12, 2009, October 12, 2009, November 12, 2009, December 12, 2009, January 12, 2010, February 12, 2010, and 12 installments of 5,833 shares on March 12, 2010 and April 12, 2010, May 12, 2010, June 12, 2010, July 12, 2010, August 12, 2010, September 12, 2010, October 12, 2010, November 12, 2010, December 12, 2010, January 12, 2011 and February 12, 2011.

(6) 38,700 restricted shares that will vest in one installment of 19,350 shares on November 11, 2009, 6 installments of 3,225 shares on December 12, 2009, January 12, 2010, February 12, 2010, March 12, 2010 and April 12 2010 and May 12, 2010.

(7) 70,000 restricted shares that will vest in one installment of 17,500 shares on August 12, 2009, 12 installments of 2,917 shares on September 12, 2009, October 12, 2009, November 12, 2009, December 12, 2009, January 12, 2010, February 12, 2010, March 12, 2010 and April 12, 2010, May 12, 2010, June 12, 2010, July 12, 2010, August 12, 2010, and 6 installments of 2,916 shares on September 12, 2010, October 12, 2010, November 12, 2010, December 12, 2010, January 12, 2011, February 12, 2011.

(8) 21,300 restricted shares that will vest in one installment of 10,650 shares on November 11, 2009, 6 installments of 1,775 shares on December 12, 2009, January 12, 2010, February 12, 2010, March 12, 2010 and April 12 2010 and May 12, 2010.

Aggregated Option/Exercises in Last Fiscal Year and 2009 Fiscal Year End Option/Values

During the fiscal year ended June 30, 2009, no stock options were exercised by our executive officers.

Long-Term Incentive Plans-Awards in Last Fiscal Year

We have no long-term incentive plans, other than the stock option plans described below under Item 12.

Compensation of Directors

The following table provides information regarding compensation earned by, awarded or paid to each person for serving as a director who is not an executive officer during Fiscal 2009:

Name	Fees Earned or Paid in Cash ($)	Stock-based Awards ($) (1)	Total ($)
Mark Germain	68,654	75,694	144,348
Nachum Rosman	15,389	62,894	78,283
Doron Shorrer	15,306	62,894	78,200
Hava Meretzki	14,895	62,894	77,789
Isaac Braun	15,753	62,894	78,647
Israel Ben-Yoram	17,208	62,894	80,102
Shai Pines	6,417	45,874	52,291

(1) The dollar value recognized for the stock-based awards was determined in accordance with SFAS No. 123(R). Assumptions used in the calculations for these amounts are included in Note 2(i) to our consolidated financial statements for fiscal 2009 included elsewhere in this Annual Report on Form 10-K.

We reimburse our directors for expenses incurred in connection with attending board meetings and provide the following compensation for directors: annual compensation of $8,400; meeting participation fees of $750 per in-person meeting; and for meeting participation by telephone, $350 per meeting. On February 7, 2007, the Board raised the annual director fee to $10,000. On May 17, 2007, the Board decided that the dollar rate would be not less then 4.25 dollar per NIS. Starting November 2008, the directors participated in a voluntary reduction of 25% on their monthly fee in exchange for issuance of shares of our common stock.

Mr. Germain was entitled to receive a consulting fee of $10,000 per month since March 11, 2007 until February 12, 2009 (before reductions). Since February 12, 2009, Mr. Germain has been entitled to the same director fee as the other directors.

During fiscal 2009 we paid a total of $153,623 to directors as compensation. This amount does not include compensation to Mr. Aberman in his capacity as a director which is reflected in the Summary Compensation Table for Fiscal 2009 above. As of June 30, 2009, the directors (not including the chairman) held 1,103,797 options and restricted shares of which 679,495 were exercisable or vested, as the case may be. On March 5, 2007 the Board approved the acceleration of the vesting of directors stock options and restricted stocks in the following circumstances: (1) termination of a director s position by the stockholders will result in the acceleration of 100% of any unvested options and (2) termination of a director s position by resignation will result in the acceleration of 50% of any unvested options.

Other than as described in the preceding two paragraphs, we have no present formal plan for compensating our directors for their service in their capacity as directors. Directors are entitled to reimbursement for reasonable travel and other out-of-pocket expenses incurred in connection with attendance at meetings of our Board. The Board may award special remuneration to any director undertaking any special services on our behalf other than services ordinarily required of a director. Other than indicated in this statement, no director received and/or accrued any compensation for his or her services as a director, including committee participation and/or special assignments during fiscal 2009.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholders Matters.

The following table sets forth certain information, to the best knowledge and belief of the Company, as of September 10, 2009 (unless provided herein otherwise), with respect to holdings of our common stock by (1) each person known by us to be the beneficial owner of more than 5% of the total number of shares of our common stock outstanding as of such date; (2) each of our directors; (3) each of our executive officers; and (4) all of our directors and our executive officers as a group.

Name and Address of Beneficial Owner	Beneficial Number of Shares[1]	Percentage
Directors and Named Executive Officers		
Zami Aberman Chief Executive Officer, Chairman of the Board, President and Director	638,958[2]	3.9%
Shai Pines Director	11,668	*
Hava Meretzki Director	96,529[3]	*
Doron Shorrer Director	118,093[4]	*
Israel Ben-Yoram Director	98,113[5]	*
Isaac Braun Director	95,260[6]	*
Nachum Rosman Director	65,669[7]	*
Mark Germain Director	340,419[8]	2.1%
Yaky Yanay		

Chief Financial Officer and Secretary	257,228(9)	1.6%
Directors and Executive Officers as a group (9 persons)	1,721,937(10)	10.1%
5% Shareholders		
Capela Overseas Ltd Goldman Sachs International Christchurch Court #10 - 15 Newgate Street London EC1A 7HD	1,434,933(11)	8.8%
Bangor Holdings Ltd. Wickham s Cay, Road Town, Tortola, British Virgin Islands	2,190,000(12)	13.1%

* = less than 1%

(1) Based on 15,796,181 shares of common stock issued and outstanding as of September 10, 2009. Except as otherwise indicated, we believe that the beneficial owners of the common stock listed above, based on information furnished by such owners, have sole investment and voting power with respect to such shares, subject to community property laws where applicable. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Shares of common stock subject to options, warrants or right to purchase or through the conversion of a security currently exercisable or convertible, or exercisable or convertible within 60 days, are reflected in the table above and are deemed outstanding for purposes of computing the percentage ownership of the person holding such option or warrants, but are not deemed outstanding for purposes of computing the percentage ownership of any other person.

(2) Includes options to acquire 453,754 shares.

(3) Includes options to acquire 79,361 shares.

(4) Includes options to acquire 100,925 shares.

(5) Includes options to acquire 78,445 shares.

(6) Includes options to acquire 78,092 shares.

(7) Includes options to acquire 48,501 shares.

(8) Includes options to acquire 291,251 shares.

(9) Includes options to acquire 147,294 shares and 21,600 warrants.

(10) Includes options to acquire 1,277,623 shares and 21,600 warrants.

(11) This information is based on a report from American Stock Transfer and Trust Company, LLC, the company s transfer agent dated August 25, 2009 and consists of 571,600 warrants.

(12) This information is based on a report from American Stock Transfer and Trust Company, LLC, the company s transfer agent dated August 25, 2009 and consists of 900,000 warrants.

Equity Compensation Plan Information

On November 25, 2003, our Board of Directors adopted our 2003 Stock Option Plan. Under the 2003 Stock Option Plan, options may be granted to our officers, directors, employees and consultants or the officers, directors, employees and consultants of our subsidiary. Pursuant to the Plan, we reserved for issuance 20,500 shares of our common stock. As of June 30, 2009, there were 10,501 shares of our common stock still available for future grant under the plan.

On November 21, 2005, our Board of Directors adopted our 2005 Stock Option Plan. Under the 2005 Stock Option Plan, options may be granted to our officers, directors, employees and consultants or the officers, directors, employees and consultants of our subsidiary. Pursuant to the 2005 Stock Option Plan, we reserved for issuance 75,000 shares of our common stock. On January 24, 2007 our Board of Directors amended the 2005 Stock Option Plan to reserve for issuance 1,400,000 shares of our common stock. On August 29, 2007, we reserved an additional 500,000 of common stock for the 2005 option plan, and on August 28, 2008 an additional 90,000 shares of common stock.

At our annual meeting of our stockholders held on January 21, 2009, our stockholders approved the adoption of the Amended and Restated 2005 Stock Option Plan of the Company, or the 2005 Plan, amending the 2005 Stock Option Plan in order to: (i) increase the number of shares of common stock authorized for issuance thereunder from 1,990,000 to be equal to 16% of the number of shares of common stock issued and outstanding on a fully diluted basis immediately prior to the grant of securities; (ii) allow the issuance of shares of common stock and units for such shares of common stock; and (iii) set the termination date of the 2005 Plan to be December 31, 2018.

On September 1, 2008, we entered into a consulting agreement. Pursuant to the agreement we granted the consultant fully vested warrants to purchase 15,000 shares of our common stock effective upon signing the contract. The warrants were not granted under our options plans. According to the agreement, additional warrants to purchase 35,000 shares of our common stock will be granted subject to a service condition. As of June 30, 2009, we assume that the service condition of this grant will not be achieved and the warrants will not be granted. All warrants are exercisable for five years at an exercise price of $1.91 per share.

In December 2008, we issued a total of 450,853 shares of our common stock to our directors, employees and consultants at a price per share of $0.40 per share. The issuance was made in exchange for a voluntary reduction in the cash compensation for a period of six months such directors and employees were due to receive in consideration for their services. These shares were not granted under our option plans.

The following table summarizes certain information regarding our equity compensation plans as of June 30, 2009:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plan approved by security holders (1)	3,688,914	$ 3.74	687,996
Equity compensation plan not approved by security holders (2)	756,742	$ 2.64	10,501
Total	4,445,656	$ 3.71	698,497

(1) Includes awards granted under the 2005 Plan.

(2) Includes awards granted under the 2003 Stock Option Plan and awards not granted under either the 2003 Stock Option Plan or the 2005 Plan.

Item 13. Certain Relationships and Related Transactions and Director Independence.

No director, executive officer, principal shareholder holding at least 5% of our common shares, or any family member thereof, had any material interest, direct or indirect, in any transaction, or proposed transaction, during the years ended June 30, 2008 and June 30, 2009, in which the amount involved in the transaction exceeded or exceeds the lesser of $120,000 or one percent of the average of our total assets at the year end for the last two completed fiscal years.

Item 14. Principal Accounting Fees and Services

The fees for services provided by Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global to the Company in the last two fiscal years were as follows:

	Twelve months ended on June 30, 2009	Twelve months ended on June 30, 2008
Audit Fees	$ 40,000	$ 50,000
Audit-Related Fees	None	None
Tax Fees	$ 13,250	$ 12,724
All Other Fees	$ 19,135	$ 2,535
Total Fees	$ 72,385	$ 65,259

Audit Fees. These fees were comprised of professional services rendered in connection with the audit of our consolidated financial statements for our annual report on Form 10-K and the review of our quarterly consolidated financial statements for our quarterly reports on Form 10-Q that are customary under auditing standards generally accepted in the United States.

Tax Fees. These fees relate to our tax compliance and tax planning.

All Other Fees. These fees were comprised mainly of fees of transfer pricing study and fees relating to the preparation and filing of an application with the Israeli Office of Chief Scientist and ongoing advice in executing the approved applications.

SEC rules require that before Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, is engaged by us to render any auditing or permitted non-audit related service, the engagement be:

1. Pre-approved by our audit committee; or

2. entered into pursuant to pre-approval policies and procedures established by the audit committee, provided the policies and procedures are detailed as to the particular service, the audit committee is informed of each service, and such policies and procedures do not include delegation of the audit committee s responsibilities to management.

The audit committee pre-approves all services provided by our independent auditors. All of the above services and fees were reviewed and approved by the audit committee before the services were rendered.

The audit committee has considered the nature and amount of fees billed by Kost Forer Gabbay & Kasierer, a member of Ernst & Young Global, and believes that the provision of services for activities unrelated to the audit is compatible with maintaining Kost Forer Gabbay & Kasierer s independence.

PART IV

Item 15. Exhibits.

3.1	Composite Copy of the Company s Articles of Incorporation as amended on June 4, 2008 and on July 1, 2008. (incorporated by reference to Exhibit 3.1 of our annual report on Form 10-K filed September 29, 2008).
3.2	Amended By-laws (incorporated by reference to Exhibit 3.1 of our current report on Form 8-K filed January 22, 2007).
4.1	Form of Common Stock Purchase Warrant (incorporated by reference from Exhibit 4.1 of our current report on Form 8-K filed on August 6, 2008).
4.2	Common Stock Purchase Warrant dated September 22, 2008 with Bangor Holdings Ltd. (incorporated by reference to Exhibit 4.1 of our current report on Form 8-K filed on September 23, 2008).
4.3	Form of Common Stock Purchase Warrant dated January 29, 2009 issued by the registrant (incorporated by reference to Exhibit 4.1 of our current report on Form 8-K filed on February 3, 2009).
4.4	Form of Common Stock Purchase Warrant dated May 5, 2009 (incorporated by reference from Exhibit 4.1 of our current report on Form 8-K filed on May 6, 2009).
10.1	Exclusive, World Wide Patent and Technology License and Assignment Agreement (incorporated by reference to Exhibit 10.1 of our Current Report on Form 8-K filed May 6, 2003).
10.2	Consulting Agreement dated September 26, 2005 with Rose High Tech Ltd. (incorporated by reference to Exhibit 10.25 of our quarterly report on Form 10-QSB filed February 9, 2006).+
10.3	Form of Subscription Agreement for Common Stock and Warrants of the Registrant (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on February 3, 2009).
10.4*	Form of Stock Option Agreement under the Amended and Restated 2005 Stock Option Plan. +
10.5	Assignment Agreement dated May 15, 2007 with each of Technion Research and Development Foundation Ltd., Shai Meretzki, Dr. Shoshana Merchav (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on May 24, 2007).
10.6	Assignment Agreement dated May 15, 2007 with Yeda Research and Development Ltd. in (incorporated by reference to Exhibit 10.2 of our current report on Form 8-K filed on May 24, 2007).
10.7	Subscription Agreement dated May 17, 2007 in respect of a private placement (incorporated by reference to Exhibit 10.3 of our current report on Form 8-K filed on May 24, 2007).
10.8	Placement Agency Agreement dated July 31, 2008 with Rodman & Renshaw (incorporated by reference to Exhibit 1.1 of our current report on Form 8-K filed on August 6, 2008)

10.9	Securities Purchase Agreement dated August 5, 2008 with the investors named therein (incorporated by reference from Exhibit 10.1 of our current report on Form 8-K filed on August 6, 2008).
10.10	Securities Purchase Agreement with Bangor Holdings Ltd. (incorporated by reference to from Exhibit 10.1 of our current report on Form 8-K filed on September 23, 2008).
10.11	Form of a Letter of Agreement dated January 26, 2008 between the registrant and certain investors (incorporated by reference to Exhibit 10.2 of our quarterly report on Form 10-Q filed on February 13, 2009).
10.12	Form of Securities Purchase Agreement dated May 5, 2009 (incorporated by reference from Exhibit 10.1 of our current report on Form 8-K filed on May 6, 2009).
10.13	Summary of Directors Ongoing Compensation (incorporated by reference to Exhibit 10.1 of our quarterly report on Form 10-Q filed on May 11, 2009).
10.14	2003 Stock Option Plan (incorporated by reference to Exhibit 4.1 of our registration statement on Form S-8 filed on December 29, 2003).
10.15	The Amended and Restated 2005 Stock Option Plan (incorporated by reference to Exhibit 10.1 of our current report on Form 8-K filed on January 23, 2009).
10.16*	Form of Restricted Stock Agreement under the Amended and Restated 2005 Stock Option Plan. +
10.17*	Form of Restricted Stock Agreement (Israeli directors and officers) under the Amended and Restated 2005 Stock Option Plan. +
14.1	Code of Business Conduct and Ethics and Compliance Program adopted by the Board of Directors (incorporated by reference to Exhibit 14.1 of our annual report on Form 10-KSB filed on September 23, 2005).
21.1	List of Subsidiaries of the Company (incorporated by reference to Exhibit 21.1 of our annual report on Form 10-K filed on September 29, 2008).
23.1*	Consent of Kost Forer Gabbay & Kasierer, A member of Ernst & Young Global.
31.1*	Certification pursuant to Rule 13a-14(a)/15d-14(a) of Zami Aberman.
31.2*	Certification pursuant to Rule 13a-14(a)/15d-14(a) of 2002 of Yaky Yanay.
32.1**	Certification pursuant to 18 U.S.C. Section 1350 of Zami Aberman.
32.2**	Certification pursuant to 18 U.S.C. Section 1350 of Yaky Yanay.

*Filed herewith.

** Furnished herewith

+ Management contract or compensation plan.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Pluristem Therapeutics Inc.

By: /s/ Zami Aberman

(Zami Aberman, Chief Executive Officer,
Principal Executive Officer)
Date: September 23, 2009

By: /s/ Yaky Yanay

Yaky Yanay, Chief Financial Officer
(Principal Financial and Accounting Officer)
Dated: September 23, 2009

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ Zami Aberman

Zami Aberman, Chief Executive Officer (Principal Executive Officer)
Chairman of the Board and Director
Dated: September 23, 2009

By: /s/ Yaky Yanay

Yaky Yanay, Chief Financial Officer
(Principal Financial and Accounting Officer)
Dated: September 23, 2009

By: /s/ Doron Shorrer

Doron Shorrer, Director
Dated: September 23, 2009

By: /s/ Hava Meretzki

Hava Meretzki, Director
Dated: September 23, 2009

By: /s/ Isaac Braun

Isaac Braun, Director
Dated: September 23, 2009

By: /s/ Israel Ben-Yoram

Israel Ben-Yoram, Director
Dated: September 23, 2009

By: /s/ Nachum Rosman

Nachum Rosman, Director
Dated: September 23, 2009

By: /s/ Mark Germain

Mark Germain, Director
Dated: September 23, 2009

By: /s/ Shai Pines

Dated: September 23, 2009