Tamir Biotechnology, Inc.
Form S-1
April 30, 2010

As filed with the Securities and Exchange Commission on April 30, 2010

Registration No. 333-

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

FORM S-1
REGISTRATION STATEMENT UNDER
THE SECURITIES ACT OF 1933

TAMIR BIOTECHNOLOGY, INC.
(Exact name of registrant as specified in its charter)

Delaware	22-2369805
(State of incorporation or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

300 Atrium Drive
Somerset, NJ 08873
(732) 652-4525
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Charles Muniz
Chief Executive Officer
300 Atrium Drive
Somerset, NJ 08873
(732) 652-4525
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Kevin T. Collins, Esq.
Goodwin Procter LLP
The New York Times Building
620 Eighth Avenue
New York, NY 10018-1405

Approximate date of commencement of proposed sale to the public:
From time to time after the effective date of this Registration Statement

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If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. / /

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. /x/

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

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

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. / /

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. / /

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

Large accelerated filer / /	Accelerated filer / /
Non-accelerated filer / / (Do not check if a smaller reporting company)	Smaller reporting company /x/

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee(5)
Common Stock issuable upon conversion of notes	24,916,667 (2)	$0.24 (3)	$ 5,980,000	$426.37
Common Stock issuable upon exercise of Series A warrants, execrable at $0.15 per share.	21,666,664	$0.24 (4)	$5,199,999	$370.76
	21,666,664	$0.25 (4)	$5,416,666	$386.21

Common Stock issuable upon exercise of Series B warrants, execrable at $0.25 per share

(1) We are registering the resale of shares of common stock by Selling Security Holders that we will issue to the Selling Security Holders upon the conversion of the notes and exercise of the warrants, which were issued to the Selling Security Holders as a result of private placements we completed in October 2009. Pursuant to Rule 416 under the Securities Act, this registration statement also covers such additional shares of common stock as may hereafter be offered or issued with respect to the shares being registered hereby as a result of stock splits, stock dividends, recapitalization or similar adjustments.

(2) Assume the accrual of three years interest at a rate of 5% on the principal of the notes and the payment of such accrued interest with shares of common stock upon the maturity date of the notes.

(3) Estimated solely for the purpose of computing the registration fee pursuant to Rule 457(c) under the Securities Act. We have estimated the offering price to be $0.24 per share based on the average of the high and low sales prices of the registrant's common stock as reported on the Pink Sheets market on April 26, 2010.

(4) Estimated solely for the purpose of computing the registration fee pursuant to Rule 457(g) under the Securities Act. Represents the higher of: (a) the exercise price of the warrants and (b) the offering price of the securities of the same class as the common stock underlying the warrants calculated in accordance with Rule 457(c).

(5) Calculated pursuant to Rule 457(a) based on an estimate of the proposed maximum aggregate offering price.

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

SUBJECT TO COMPLETION, DATED _____, 2010

TAMIR BIOTECHNOLOGY, INC.

68,249,995 shares of Common Stock

This prospectus relates to the offer for sale of up to 68,249,995 shares of our common stock by certain existing holders of the securities, referred to as Selling Security Holders throughout this document. Each of the Selling Security Holders will receive all of the net proceeds from the sale of shares by that holder. We will not receive any of the proceeds of this offering.

On April 27, 2010, our stockholders approved an amendment to our certificate of incorporation which changed our name from Alfacell Corporation to Tamir Biotechnology, Inc. This amendment to our certificate of incorporation had been previously approved by our board of directors and was filed with the State of Delaware on April 27, 2010.

Our common stock is traded on the Pink Sheets market and prices are quoted under the symbol “ACEL”. On April 26, 2010, the last reported price was $0.25.

Investing in our stock involves substantial risks. See “Risk Factors” beginning on page 3.

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

The date of this Prospectus is _____, 2010

The information in this prospectus is not complete and may be changed. The Selling Security Holders will not sell these securities until after the Registration Statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

TABLE OF CONTENTS

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front of this prospectus.

PROSPECTUS SUMMARY

This summary highlights information found elsewhere in this prospectus. Accordingly, it does not contain all of the information which may be important to you. Prospective purchasers should read the following summary carefully in conjunction with the more detailed information appearing elsewhere in this Prospectus concerning Tamir Biotechnology, Inc. and the securities being offered, including our financial statements and related notes and the information under “Risk Factors.” As used herein, references to “we”, “our”, “us” and “our Company” refer to Tamir Biotechnology, Inc.

ABOUT THIS PROSPECTUS

We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained in this prospectus. You should not rely on any unauthorized information. This prospectus does not offer to sell or buy any securities in any jurisdiction in which it is unlawful. The information in this prospectus is current as of the date on the cover.

This prospectus is part of a Registration Statement on Form S-1 that we filed with the Securities and Exchange Commission that relates to the offer for sale of 68,249,995 shares of our common stock by certain existing holders of the securities, referred to as Selling Security Holders throughout this document. Each of the Selling Security Holders will receive all of the net proceeds from the sale of shares by that holder. We will not receive any of the proceeds of this offering. The common stock is traded on the Pink Sheets market and prices are quoted under the symbol “ACEL.” On April 26, 2010, the last reported price was $0.25.

You should read both this prospectus and any prospectus supplement together with additional information described below under the heading “Where You Can Find More Information.”

THE COMPANY

Tamir Biotechnology, Inc. (formerly known as Alfacell Corporation) is a biopharmaceutical company primarily engaged in the discovery and development of a new class of therapeutic drugs for the treatment of cancer and other pathological conditions. Our proprietary drug discovery and development program consists of novel therapeutics developed from amphibian ribonucleases (RNases).

RNases are biologically active enzymes that split RNA molecules. RNases are enzymes which play important roles in nature, among which is the development of an organism and in cell functions. RNA is an essential bio-chemical cellular component necessary to support life. There are various types of RNA, all of which have specific functions in a living cell. They help control several essential biological activities, namely, regulation of cell proliferation, maturation, differentiation and cell death. Therefore, we believe they are ideal candidates for the development of therapeutics for cancer and other life-threatening diseases, including HIV and autoimmune diseases, that require anti-proliferative and apoptotic, or programmed cell death, properties.

ONCONASE® (ranpirnase) is a novel amphibian ribonuclease, unique among the superfamily of pancreatic ribonuclease isolated from the eggs of the Rana pipiens (the Northern Leopard frog). Ranpirnase is the smallest known protein belonging to the superfamily of pancreatic ribonuclease and has been shown, on a molecular level, to re-regulate the unregulated growth and proliferation of cancer cells. Unlike most anti-cancer agents that attack all cells regardless of phenotype (malignant versus normal) and cause severe toxicities, ONCONASE® is not an indiscriminate cytotoxic drug (cell killing agent). ONCONASE® primarily affects exponentially growing malignant cells, with activity controlled through unique and specific molecular mechanisms.

Tamir Biotechnology, Inc. was initially incorporated in Delaware in 1981 under the name of Alfacell Corporation. The Company changed its name to Tamir Biotechnology, Inc. on April 27, 2010. Our principal executive offices are located at 300 Atrium Drive, Somerset, New Jersey 08873 and our telephone number is (732) 652-4525.

RISKS ASSOCIATED WITH OUR BUSINESS

Our business is subject to numerous risks and uncertainties, as more fully described under “RISK FACTORS” beginning on page 3, which you should carefully consider before purchasing our common stock. For example:

- We are highly dependent on achieving success in the clinical testing, regulatory approval and commercialization of ONCONASE®, and our other compounds currently under development. If we fail to obtain the necessary regulatory approvals, we will not be allowed to commercialize ONCONASE® and our business will be harmed.

- We have incurred losses since inception and anticipate that we will incur continued losses for the foreseeable future. We do not have a current source of product revenue and may never be profitable.

- We will need additional financing to continue operations, which may not be available on favorable or acceptable terms, if it is available at all.

- We are highly dependent on our only executive officer, Charles Muniz, our President, Chief Executive Officer and Chief Financial Officer. If we lose key management personnel or are unable to attract and retain the talent required for our business, our business could be materially harmed.

- We are involved in several lawsuits, and unfavorable results of legal proceedings could have a material adverse effect on us.

In addition, the ability of new shareholders to influence corporate matters may be limited because a small number of stockholders beneficially currently own a substantial amount of our common stock. As of March 12, 2010, Mr. Muniz owns approximately 32% of our common stock; Knoll Capital Management LP, Fred Knoll and Europa International, Inc. own a total of approximately 30% of our common stock; McCash Family Limited Partnership owns approximately 10% of our common stock; James O. McCash and James O. McCash Trust own approximately 6% of our common stock; and Unilab LP owns approximately 10% of our common stock.

RISK FACTORS

An investment in our common stock is speculative and involves a high degree of risk. You should carefully consider the risks and uncertainties described below and the other information in this prospectus and our other SEC filings before deciding whether to purchase shares of our common stock. If any of the following risks actually occur, our business and operating results could be harmed. This could cause the trading price of our common stock to decline, and you may lose all or part of your investment.

Risks related to the Development of our Product Candidates

We are highly dependent on achieving success in the clinical testing, regulatory approval and commercialization of ONCONASE®, and our other compounds currently under development. If we fail to obtain the necessary regulatory approvals, we will not be allowed to commercialize ONCONASE® and our business will be harmed.

The Food and Drug Administration, or FDA, in the United States and comparable regulatory agencies in foreign countries impose substantial pre-market approval requirements on the introduction of pharmaceutical products. These requirements involve the completion of lengthy and detailed pre-clinical and clinical testing and other costly and time consuming procedures. Satisfaction of these requirements typically takes several years depending on the level of complexity and novelty of the product. The length of time required to complete a clinical trial depends on several factors including the size of the patient population, the ability of patients to get to the site of the clinical study, and the criteria for determining which patients are eligible to join the study. A significant portion of our expenditures have been devoted and, in the future will be devoted, to the clinical trials for our lead product candidate, ONCONASE® . Although the financing we received in October 2009 will enable us to commence a new clinical trial for ONCONASE®, we will be required to obtain additional financing to complete this trial and pursue the further development of ONCONASE®. Such financing may not be available, and even if it is available, it may not be available on terms favorable or acceptable to us.

All statutes and regulations governing the conduct of clinical trials are subject to future changes by various regulatory agencies, including the FDA, which could affect the cost and duration of our clinical trials. Any unanticipated costs or delays in our clinical studies would delay our ability to generate product revenues and to raise additional capital and could cause us to be unable to fund the completion of the studies.

We may not market or sell any product for which we have not obtained regulatory approval. We cannot assure you that the FDA or other regulatory agencies will ever approve the use of our products that are under development. Even if we receive regulatory approval, such approval may involve limitations on the indicated uses for which we may market our products. Further, even after approval, discovery of previously unknown problems could result in additional restrictions, including withdrawal of our products from the market.

If we fail to obtain the necessary regulatory approvals, we cannot market or sell our products in the United States or in other countries and our viability would be threatened. If we fail to achieve regulatory approval or foreign marketing authorizations for ONCONASE® we will not have a product suitable for sale or product revenues and may not be able to continue operations.

Our profitability will depend on our ability to develop, obtain regulatory approvals for, and effectively market ONCONASE® as well as entering into strategic alliances for the development of new drug candidates from the out-licensing of our proprietary RNase technology. The commercialization of our pharmaceutical products involves a number of significant challenges. In particular, our ability to commercialize ONCONASE® depends on the success of our clinical development programs, our efforts to obtain regulatory approval and our sales and marketing efforts or those of our marketing partners, directed at physicians, patients and third-party payors. A number of factors could

affect these efforts including

- our ability to demonstrate clinically that our products are effective and safe;
- delays or refusals by regulatory authorities in granting marketing approvals;
- our limited financial resources relative to our competitors;
- our ability to obtain and maintain relationships with current and additional marketing partners;
- the availability and level of reimbursement for our products by third party payors;
- incidents of adverse reactions to our products;
- misuse of our products and unfavorable publicity that could result; and
- the occurrence of manufacturing or distribution disruptions.

Based upon guidance provided by the FDA at a pre-NDA meeting, we decided not to file a new drug application (NDA) for ONCONASE® for unresectable malignant mesothelioma (UMM) and to not pursue further clinical trials of ONCONASE® for the treatment of UMM.

The results of the preliminary statistical analysis of the data from the confirmatory Phase IIIb clinical trial we conducted for ONCONASE® in patients suffering from UMM did not meet statistical significance for the primary endpoint of survival in UMM. Although a statistically significant improvement in survival was seen in the treatment of UMM patients who failed one prior chemotherapy regimen, a pre-defined primary data set for this sub-group of patients in the trial, at a pre-NDA meeting with the FDA held in January 2009, the FDA recommended that an additional clinical trial be conducted in this sub-group of patients prior to our submitting an NDA for ONCONASE®. Based upon our assessment that it would be difficult to design and conduct a clinical trial that would comply with the FDA's recommendation and allow us to file an NDA, we have determined at this time not to pursue further clinical trials for the treatment of UMM. Based upon the results of certain preclinical testing performed on ONCONASE® we have decided to pursue a Phase II clinical trial for ONCONASE® for the treatment of non-small cell lung cancer in patients who have reached maximum progression on their current chemotherapy regimens. Although the financing we received in October 2009 will enable us to initiate this Phase II clinical trial, we will be required to obtain additional financing to complete this clinical trial and pursue further development of ONCONASE®. We cannot assure you that we will be able to commence or complete the new Phase II clinical trial for ONCONASE®, or that the results from this clinical trial will be positive. Even if the results from this Phase II clinical trial are positive, we cannot assure you that the results of subsequent Phase III clinical trials will be positive or will support marketing approval of ONCONASE® in the United States or in any other jurisdictions.

Budget constraints may force us to delay our efforts to develop certain drug product candidates in favor of developing others, which may prevent us from commercializing all drug product candidates as quickly as possible.

Because we are an emerging company with limited resources, and because developing new drug product candidates is an expensive process, we must regularly assess the most efficient allocation of our research and development budget. As a result, we may have to further prioritize development activities and may not be able to fully realize the value of some of our drug product candidates in a timely manner, and they may be delayed in reaching the market, if at all. A reduction in spending on our other drug product candidates could delay our commercialization efforts and negatively impact our ability to diversify our development risk across a broad portfolio of drug product candidates.

Risks Related to Our Financial Position and Need for Additional Capital

We have incurred losses since inception and anticipate that we will incur continued losses for the foreseeable future. We do not have a current source of product revenue and may never be profitable.

We are a development stage company and since our inception one of the principal sources of our working capital has been private sales of our common stock. Over the past three fiscal years, we have incurred aggregate net losses of approximately $25.6 million and since our inception we have incurred aggregate net losses of approximately $108.9 million. We expect to incur additional losses and, as our development efforts, efforts to file an NDA for ONCONASE® and clinical testing activities continue, our rate of losses may increase. We also expect to experience negative cash flows for the foreseeable future as we fund our losses and capital expenditures. Our losses have adversely impacted, and will continue to adversely impact, our working capital, total assets and stockholders' equity. To date, we have not sold or received approval to sell any drug product candidates, and it is possible that revenues from drug product sales will never be achieved. We cannot at this time predict when or if we will be able to develop other sources of revenue or when or if our operations will become profitable, even if we are able to commercialize some of our drug product candidates.

4

We will seek to generate revenue through licensing, marketing and development arrangements prior to receiving revenue from the sale of our products. Currently, we are party to four non-US regional marketing and distribution agreements and we may not be able to successfully negotiate any additional agreements. In the past, we have entered into several development arrangements which have resulted in limited revenues for us. We cannot assure investors that these arrangements or future arrangements, if any, will result in significant amounts of revenue for us in the future. We, therefore, are unable to predict the extent of any future losses or the time required to achieve profitability, if at all.

We will need additional financing to continue operations, which may not be available on favorable or acceptable terms, if it is available at all.

Based upon our current operations and our plans for a Phase II clinical trial for ONCONASE® for the treatment of non-small cell lung cancer in patients who have reached maximum progression on their current chemotherapy regimens, we expect that our current cash reserves should be sufficient to support our activities through July 2010. Although our current cash reserves will enable to initiate this Phase II clinical trial, provided we obtain the required approval from the FDA, we will need to obtain additional financing to complete the clinical trial and pursue further development of ONCONASE®. As a result of our continuing losses and lack of capital, the report of our independent registered public accounting firm on our July 31, 2009 audited financial statements included an explanatory paragraph which states that our recurring losses from operations and negative cash flows from operating activities raise substantial doubt about our ability to continue as a going concern. Our financial statements at July 31, 2009 do not include any adjustments that might result from the outcome of this uncertainty. We will need additional financing to conduct our business after July 2010. Factors that would affect our ability to obtain capital in the future and the amount and timing of additional capital required include, but are not limited to, the following:

- the condition of the capital markets in general and the willingness of investors to invest in development stage biotech companies, in particular;
- the progress and cost of research and development and clinical trial activities relating to our drug product candidates;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our patent claims and other intellectual property rights and investigating and defending against infringement claims asserted against us by others;
- the emergence of competing technologies and other adverse market developments;
- changes in or terminations of our existing licensing, marketing and distribution arrangements;
- the amount of milestone payments we may receive from current and future collaborators, if any; and
- the cost of manufacturing scale-up and development of marketing operations, if we undertake those activities.
- our degree of success in commercializing our drug product candidates, including entering into additional marketing and distribution agreements;
- our ability to obtain marketing approval of our product candidates

Additional financing may not be available when we need it or be on terms acceptable to us. If adequate financing is not available or we are unable to conclude a strategic transaction prior to the time our current cash reserves are exhausted we will be required to cease operations. If additional capital is raised through the sale of equity, our stockholders' ownership interest could be diluted and such newly-issued securities may have rights, preferences, or privileges superior to those of our other stockholders. The terms of any debt securities we may sell to raise additional capital may place restrictions on our operating activities.

We will need additional capital in the future and the Notes may make it more difficult for us to obtain the needed capital.

We will need to obtain additional financing over time to fund our operations. The security interest in all of our assets which secures our obligations under the Notes, the covenants in the Notes, the conversion terms of the Notes and the exercise terms of the Warrants issued with the Notes could make it difficult for us to obtain needed financing or could result in our obtaining financing with unfavorable terms. Our failure to obtain financing or obtaining financing on unattractive terms could have a material adverse effect on our business.

A portion of the proceeds received pursuant to our October 2009 private financing were placed in an escrow account, and pursuant to the terms of an escrow agreement governing the escrow account may only be used for certain limited purposes.

In connection with our October 2009 private financing, we entered into an escrow agreement whereby certain investors placed $1.6 million of the proceeds paid for their units purchased in the financing in an escrow account. The escrow agreement shall terminate on the earlier of the date that all funds have been disbursed from the escrow account and April 19, 2011, at which time any remaining funds will be disbursed to us. Such amounts can be disbursed from the escrow account only to satisfy obligations of ours owed to clinical research organizations, hospitals, doctors and other vendors and service providers associated with the clinical trials which we intend to conduct for our ONCONASE® product. Until such time that the escrow agreement terminates, we are not permitted to use the funds in the escrow account for any other purposes.

We face certain litigation risks, and unfavorable results of legal proceedings could have a material adverse effect on us.

As described under the heading “LEGAL PROCEEDINGS” of this Registration Statement on Form S-1, we are a party to certain lawsuits. Regardless of the merits of any claim, litigation can be lengthy, time-consuming, expensive, and disruptive to normal business operations and may divert management’s time and resources, which may have a material adverse effect on our business, financial condition and results of operations, including our cash flow. The results of complex legal proceedings are difficult to predict. Should we fail to prevail in these matters, or should any of these matters be resolved against us, we may be faced with significant monetary damages, which also could materially adversely affect our business, financial condition and results of operations, including our cash flow. In addition, we may incur higher general and administrative expenses than we have in the past in order to defend and prosecute this litigation, which could adversely affect our operating results.

The ability of our stockholders to recover against Armus Harrison & Co., or AHC, may be limited because we have not been able to obtain the reissued reports of AHC with respect to the financial statements included in our Annual Report on Form 10-K for the fiscal year ended July 31, 2009, nor have we been able to obtain AHC’s consent to the use of such report herein.

Section 18 of the Securities Exchange Act of 1934, or Exchange Act, provides that any person acquiring or selling a security in reliance upon statements set forth in a Form 10-K may assert a claim against every accountant who has with its consent been named as having prepared or certified any part of the Form 10-K, or as having prepared or certified any report or valuation that is used in connection with the Form 10-K, if that part of the Form 10-K at the time it is filed contains a false or misleading statement of a material fact, or omits a material fact required to be stated therein or necessary to make the statements therein not misleading (unless it is proved that at the time of such acquisition such acquiring person knew of such untruth or omission).

In June 1996, AHC dissolved and ceased all operations. Therefore, we have not been able to obtain the reissued reports of AHC with respect to the financial statements included in the Annual Report on Form 10-K for the fiscal year ended July 31, 2009 nor have we been able to obtain AHC’s consent to the use of such report herein. As a result, in the event any persons seek to assert a claim against AHC under Section 18 of the Exchange Act for any untrue statement of a material fact contained in these financial statements or any omissions to state a material fact required to be stated therein, such persons will be barred. Accordingly, you may be unable to assert a claim against AHC under Section 18 of the Exchange Act for any purchases of the Company’s common stock made in reliance upon statements set forth in our Annual Report on Form 10-K for the fiscal year ended July 31, 2009. In addition, the ability of AHC to satisfy any claims properly brought against it may be limited as a practical matter due to AHC’s dissolution in 1996.

Our investments could lose market value and consequently harm our ability to fund continuing operations.

The primary objective of our investment activities is to preserve principal while at the same time maximizing yields without significantly increasing risk. To achieve this objective, we maintain our portfolio of cash and cash equivalents in a variety of securities, including government and corporate obligations and money market funds. The market values of these investments may fluctuate due to market conditions and other conditions over which we have no control. Fluctuations in the market price and valuations of these securities may require us to record losses due to impairment in the value of the securities underlying our investment. This could result in future charges to our earnings. All of our investment securities are denominated in US dollars.

Investments in both fixed-rate and floating-rate interest earning instruments carry varying degrees of interest rate risk. Fixed-rate securities may have their fair market value adversely impacted due to a rise in interest rates. In general, securities with longer maturities are subject to greater interest rate risk than those with shorter maturities. While floating-rate securities generally are subject to less interest rate risk than fixed-rate securities, floating-rate securities may produce less income than expected if interest rates decrease. Due in part to these factors, our investment income may fall short of expectations or we may suffer losses in principal if securities are sold that have declined in market value due to changes in interest rates.

Risks Related to the Commercialization of our Product Candidates

Our product candidates may not be accepted by the market.

Even if approved by the FDA and other regulatory authorities, our product candidates may not achieve market acceptance, which means we would not receive significant revenues from these products. Approval by the FDA does not necessarily mean that the medical community will be convinced of the relative safety, efficacy and cost-effectiveness of our products as compared to other products. In addition, third party reimbursers such as insurance companies and HMOs may be reluctant to reimburse expenses relating to our products.

We are and will be dependent upon third parties for manufacturing our products. If these third parties do not devote sufficient time and resources to our products our revenues and profits may be adversely affected.

We do not have the required manufacturing facilities to manufacture our product. We presently rely on third parties to produce ONCONASE® for use in clinical trials. We have entered into a ten-year purchase and supply agreement with SPL, for the manufacturing of ranpirnase (protein drug substance) from the oocytes, or the unfertilized eggs, of the Rana pipiens frog, which is found in the Northwest United States and is commonly called the leopard frog.

Additionally, we contract with Ben Venue for the manufacturing of ONCONASE® and with Bilcare, Catalent and Aptuit for the storage, labeling and shipping of ONCONASE® for clinical trial use. We utilize the services of these third party manufacturers solely on an as needed basis with terms and prices customary for our industry.

We use FDA CGMP licensed manufacturers for ranpirnase and ONCONASE®. We have identified alternative providers for the manufacturing services for which we may contract. In order to replace an existing service provider we must amend the Investigational New Drug Application (IND) for our Product Candidate to notify the FDA of the new manufacturer. Although the FDA generally will not suspend or delay a clinical trial as a result of replacing an existing manufacturer, the FDA has the authority to suspend or delay a clinical trial if, among other grounds, human subjects are or would be exposed to an unreasonable and significant risk of illness or injury as a result of the replacement manufacturer.

We intend to rely on third parties to manufacture our products if they are approved for sale by the appropriate regulatory agencies and are commercialized. Third party manufacturers may not be able to meet our needs with respect to the timing, quantity or quality of our products or to supply products on acceptable terms.

Because we do not have in-house marketing, sales or distribution capabilities, we have contracted with third parties and expect to contract with third parties in the future for these functions and we will therefore be dependent upon such third parties to market, sell and distribute our products in an effort to generate revenues.

We currently have no in-house sales, marketing or distribution capabilities. In order to commercialize any product candidates for which we receive FDA or non-U.S. approval, we expect to rely on established third parties who have strategic partnerships with us to perform these functions. To date, we have entered into four marketing and

distribution agreements for ONCONASE® in regions outside the United States. We cannot assure you we will be able to maintain these relationships or establish new relationships with biopharmaceutical or other marketing companies with existing distribution systems and direct sales forces to market any or all of our product candidates on acceptable terms, if at all.

In addition, we may incur significant expenses in determining our commercialization strategy with respect to one or more of our product candidates for regions outside the United States. The determination of our commercialization strategy with respect to a product candidate will depend on a number of factors, including:

- the extent to which we are successful in securing third parties to collaborate with us to offset some or all of the funding obligations with respect to product candidates;
- the extent to which our agreement with our collaborators permits us to exercise marketing or promotion rights with respect to the product candidate;
- how our product candidates compare to competitive products with respect to labeling, pricing, therapeutic effect, and method of delivery; and
- whether we are able to establish agreements with third party collaborators, including large biopharmaceutical or other marketing companies, with respect to any of our product candidates on terms that are acceptable to us.

If we are unable to obtain favorable reimbursement for our product candidates, their commercial success may be severely hindered.

Our ability to sell our future products may depend in large part on the extent to which reimbursement for the costs of our products is available from government entities, private health insurers, managed care organizations and others. Third-party payors are increasingly attempting to contain their costs. We cannot predict what actions third-party payors may take, or whether they will limit the coverage and level of reimbursement for our products or refuse to provide any coverage at all. Reduced or partial reimbursement coverage could make our products less attractive to patients, suppliers and prescribing physicians and may not be adequate for us to maintain price levels sufficient to realize an appropriate return on our investment in our product candidates or to compete on price.

In some cases, insurers and other healthcare payment organizations try to encourage the use of less expensive generic brands and over-the-counter, or OTC, products through their prescription benefits coverage and reimbursement policies. These organizations may make the generic alternative more attractive to the patient by providing different amounts of reimbursement so that the net cost of the generic product to the patient is less than the net cost of a prescription brand product. Aggressive pricing policies by our generic product competitors and the prescription benefits policies of insurers could have a negative effect on our product revenues and profitability.

Many managed care organizations negotiate the price of medical services and products and develop formularies for that purpose. Exclusion of a product from a formulary can lead to its sharply reduced usage in the managed care organization patient population. If our products are not included within an adequate number of formularies or adequate reimbursement levels are not provided, or if those policies increasingly favor generic or OTC products, our market share and gross margins could be negatively affected, as could our overall business and financial condition.

The competition among pharmaceutical companies to have their products approved for reimbursement may also result in downward pricing pressure in the industry or in the markets where our products will compete. We may not be successful in any efforts we take to mitigate the effect of a decline in average selling prices for our products. Any decline in our average selling prices would also reduce our gross margins.

In addition, managed care initiatives to control costs may influence primary care physicians to refer fewer patients to oncologists and other specialists. Reductions in these referrals could have a material adverse effect on the size of our potential market and increase costs to effectively promote our products.

We are subject to new legislation, regulatory proposals and managed care initiatives that may increase our costs of compliance and adversely affect our ability to market our products, obtain collaborators and raise capital.

8

There have been a number of legislative and regulatory proposals aimed at changing the healthcare system and pharmaceutical industry, including reductions in the cost of prescription products and changes in the levels at which consumers and healthcare providers are reimbursed for purchases of pharmaceutical products. These include the Affordable Health Care for America Act, recently passed by the United States Congress and singed into law by the President and the Prescription Drug and Medicare Improvement Act of 2003. Although we cannot predict the full effects on our business of the implementation of this new legislation, it is possible that current legislation, as well as legislation that may be adopted in the future, will result in decreased reimbursement for prescription drugs, which may further exacerbate industry-wide pressure to reduce the prices charged for prescription drugs. This could harm our ability to market our products and generate revenues. As a result of current legislation, as well as legislation that may be adopted in the future, we may determine to change our current manner of operation, provide additional benefits or change our contract arrangements, any of which could harm our ability to operate our business efficiently, obtain collaborators and raise capital.

Competition in the biopharmaceutical field is intense and subject to rapid technological change. Our principal competitors have substantially greater resources to develop and market products that may be superior to ours.

If we obtain regulatory approval for any of our drug product candidates, the extent to which they achieve market acceptance will depend, in part, on competitive factors. Competition in our industry is intense, and it is increased by the rapid pace of technological development. Existing drug products or new drug products developed by our competitors may be more effective or have fewer side effects, or may be more effectively marketed and sold, than any that we may develop. Our principal competitors have substantially greater research and development capabilities and experience and greater manufacturing, marketing, financial, and managerial resources than we do. Competitive drug compounds may render our technology and drug product candidates obsolete or noncompetitive prior to our recovery of research, development, or commercialization expenses incurred through sales of any of our drug product candidates. The FDA's policy of granting "fast track" approval for cancer therapies may also expedite the regulatory approval of our competitors' drug product candidates.

To our knowledge, no other company is developing a product with the same mechanism of action as ONCONASE®. However, there may be other companies, universities, research teams or scientists who are developing products to treat the same medical conditions our products are intended to treat.

We also compete with other drug development companies for collaborations with large pharmaceutical and other companies.

Risks Related to this Offering and the Market for our Common Stock

Our stock price has been and is likely to continue to be volatile, and an investment in our common stock could decline in value.

The market price of our common stock, like that of the securities of many other development stage biotechnology companies, has fluctuated over a wide range and it is likely that the price of our common stock will fluctuate in the future. For example, over our past three fiscal years, the sale price for our common stock has fluctuated from a low of $0.06 to a high of $4.29. The market price of our common stock could be impacted by a variety of factors, including:

- the success or failure of our clinical trials or those of our competitors;
- announcements of technological innovations or new drug products by us or our competitors;
- Actual or anticipated fluctuations in our financial results;
- our ability to obtain financing, when needed;

- economic conditions in the United States and abroad;
- Comments by or changes in our assessments or financial estimates by securities analysts;
- adverse regulatory actions or decisions;
- Losses of key management;
- changing governmental regulations;
- our ability to secure adequate third party reimbursement for products developed by us;
- developments or disputes concerning patents or other proprietary rights;
- product or patent litigation; and
- Public concern as to the safety of products developed by us.

The stock market continues to experience extreme price and volume fluctuations and these fluctuations have especially affected the market price of many biotechnology companies. Such fluctuations have often been unrelated to the operating performance of these companies. Volatility or a lack of positive performance in our stock price may adversely affect our ability to retain key employees, all of whom have been granted stock options. These factors and fluctuations, as well as political and market conditions, may materially adversely affect the market price of our common stock.

A few significant stockholders control the direction of our business. If the ownership of our common stock continues to be highly concentrated, it will prevent other shareholders from influencing significant corporate actions.

The ability of other shareholders to influence corporate matters may be limited because a small number of stockholders beneficially currently own a substantial amount of our common stock. As of March 12, 2010, Mr. Muniz owns approximately 32% of our common stock; Knoll Capital Management LP, Fred Knoll and Europa International, Inc. own a total of approximately 30% of our common stock; McCash Family Limited Partnership owns approximately 10% of our common stock; James O. McCash and James O. McCash Trust own approximately 6% of our common stock; and Unilab LP owns approximately 10% of our common stock. For more details of beneficial ownership of our shares, see "SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT." Our significant shareholders will be able to exert a significant degree of influence over our management and affairs and all actions requiring stockholders approval, such as the election of directors and approval of significant corporation transaction.

In addition, Delaware corporate law provides that certain actions may be taken by consent action of stockholders holding a majority of the outstanding shares. In the event that the requisite approval of stockholders is obtained by consent action, without any meeting of stockholders, dissenting or non-participating stockholders generally would be bound by such vote. Through their concentration of voting power, our significant shareholders could delay, deter or prevent a change in control of our company or other business combinations that might otherwise be beneficial to our other stockholders. Accordingly, this concentration of ownership may harm the market price of our common stock. In addition, the interest of our significant stockholders may not always coincide with the interest of the Company's other stockholders. In deciding how to vote on such matters, they may be influenced by interests that conflict with our other shareholders'.

Our incorporation documents may delay or prevent the removal of our current management or a change of control that a stockholder may consider favorable.

We are currently authorized to issue 1,000,000 shares of preferred stock. Our Board of Directors is authorized, without any approval of the stockholders, to issue the preferred stock and determine the terms of the preferred stock. This provision allows the Board to affect the rights of stockholders, since the Board of Directors can make it more difficult for common stockholders to replace members of the Board. Because the Board is responsible for appointing the members of our management, these provisions could in turn affect any attempt to replace current management by the common stockholders. Furthermore, the existence of authorized shares of preferred stock might have the effect of discouraging any attempt by a person, through the acquisition of a substantial number of shares of common stock, to acquire control of us. Accordingly, the accomplishment of a tender offer may be more difficult. This may be beneficial to management in a hostile tender offer, but have an adverse impact on stockholders who may want to participate in the tender offer or inhibit a stockholder's ability to receive an acquisition premium for his or her shares.

Events with respect to our share capital could cause the price of our common stock to decline.

Sales of substantial amounts of our common stock in the open market, or the availability of such shares for sale, could adversely affect the price of our common stock. We had 47,313,880 shares of common stock outstanding as of the end

of our most recently completed fiscal quarter ended January 31, 2010. The following securities that may be exercised into shares of our common stock were issued and outstanding as of January 31, 2010:

- Options. Stock options to purchase 3,624,267 shares of our common stock at a weighted average exercise price of approximately $1.82 per share.
- Warrants. Warrants to purchase 51,183,890 shares of our common stock at a weighted average exercise price of approximately $0.56 per share. These warrants include warrants issued in connection with the private financing we completed in October 2009.
- Notes. Senior Secured Convertible Notes convertible into an aggregate of 24,916,667 shares of our common stock at a conversion price of $0.15 per share, assuming the accrual of three years interests at a rate of 5% on the principals of the Notes upon their maturity date and the payment of such accrued interest with shares of our common stock.

The shares of our common stock that may be issued under the options and warrants are currently registered with the SEC, are being registered with the SEC on a registration statement to which this prospectus forms a part, or are eligible for sale without any volume limitations pursuant to Rule 144 under the Securities Act.

The securities issued in our October 2009 private financing include the following:

- Notes. Senior Secured Convertible Notes, or the Notes, convertible into an aggregate of 24,916,667 shares of our common stock at a conversion price of $0.15 per share, assuming three-year interests will accrue in full at a rate of 5% on the principals of the Notes upon their maturity date.
- Series A Warrants. Series A Warrants to purchase an aggregate of 21,666,664 shares of our common stock at an exercise price of $0.15 per share with a three-year term.
- Series B Warrants. Series B Warrants to purchase an aggregate of 21,666,664 shares of our common stock at an exercise price of $0.25 per share with a five-year term (the Series B Warrants and the Series A Warrants collectively refereed to as the Warrants).

Pursuant to the terms of an investor rights agreement or the Investor Rights Agreement entered into in connection with the financing, we must file a “resale” registration statement covering all of the shares issuable upon conversion of the Notes and the shares issuable upon exercise of the Warrants, up to the maximum number of shares able to be registered pursuant to applicable SEC regulations, by May 1, 2010 as the filing deadline and obtain the effectiveness of such registration statement within 90 days following the filing deadline or within 120 days following the filing deadline if the SEC reviews and has written comments to the registration statement. If any securities issuable upon conversion or exercise, respectively, of the Notes and Warrants are unable to be included on the initial “resale” registration statement, we have agreed to file subsequent registration statements until all of the securities have been registered. We are obligated to maintain the effectiveness of the “resale” registration statement until all securities therein are sold or otherwise can be sold pursuant to Rule 144 under the Securities Act, without any restrictions. A cash penalty at the rate of 1% per month will be triggered in the event the Company fails to file or obtain the effectiveness of a registration statement prior to the deadlines set forth in the Investor Rights Agreement or if the Company ceases to be current in filing its periodic reports with the SEC. The aggregate penalty accrued with respect to each investor may not exceed 6% of the original purchase price paid by that investor, or 12% if the only effectiveness failure is the Company’s failure to be current in its periodic reports with the SEC.

We have significant secured indebtedness as a result of a private financing, which we closed in October 2009, pursuant to which we issued the Notes. If we are unable to perform our obligations under such notes, the holders of such notes would be entitled to realize upon their security interest by taking control of all or a portion of our assets.

We substantially increased our debt when we issued the Notes in the aggregate principal amount of $3.25 million pursuant to a private financing in October 2009. The Notes mature on the earliest of (i) October 19, 2012; (ii) the closing of a public or private offering of the Company’s debt or equity securities subsequent to the date of issuance of the Notes resulting in gross proceeds of at least $8,125,000, other than a transaction involving a stockholder who holds 5% or more of the Company’s outstanding capital stock as of the date of issuance of the Notes; or (iii) on the demand of the holder of a Note upon the Company’s consummation of a merger, sale of substantially all of its assets, or the acquisition by any entity, person or group of 50% or more of the voting power of the Company. Interest accrues on the principal amount outstanding under the Notes at a rate of 5% per annum, and is due upon maturity. Upon an event of default under the Notes, the interest rate shall increase to 7%. The Notes are convertible into shares of the Company’s common stock at the option of the holder of such note at a price of $0.15 per share at any time prior to the date on which the Company makes payment in full of all amounts outstanding under such note. The Notes are not prepayable for a period of one year following the issuance thereof.

11

The Notes are secured by a senior security interest and lien on all of the Company's rights, title and interest to all of the assets owned by the Company as of the issuance of the Notes or thereafter acquired pursuant to the terms of a security agreement entered into by the Company with each of the investors. In the case of an event of default under the Notes, the holders of the notes would be entitled to realize their security interests and foreclose on our assets. In addition, the holders of the notes would be entitled to declare the principal and accrued interest thereunder to be due and payable. Our assets may not be sufficient to fully repay amounts outstanding under the Notes in the event of any such acceleration upon an event of default.

The trading market for our common stock may be limited since our common stock is no longer listed on the Nasdaq Capital Market.

On January 6, 2009 our common stock was delisted from the Nasdaq Capital Market. Since then our common stock has been quoted on the Pink Sheets and may be thinly traded at times. You may be unable to sell our common stock during times when the trading market is limited.

We are subject to penny stock rules. As a consequence, sale of our stock by investors may be difficult.

The term "penny stock" generally refers to low-priced speculative securities of very small companies. We are subject to SEC's penny stock rules.

Before a broker-dealer can sell a penny stock, SEC rules require the firm to first approve the customer for the transaction and receive from the customer a written agreement to the transaction. The firm must furnish the customer a document describing the risks of investing in penny stocks. The firm must tell the customer the current market quotation, if any, for the penny stock and the compensation the firm and its broker will receive for the trade. Finally, the firm must send monthly account statements showing the market value of each penny stock held in the customer's account.

Penny stocks may trade infrequently, which means that it may be difficult to sell our shares once you own them. Because it may be difficult to find quotations for certain penny stocks, they may be impossible to accurately price. Investors in penny stocks should be prepared for the possibility that they may lose their whole investment.

Risks Related to Our Operations

Our lack of operating experience may cause us difficulty in managing our growth.

We have no experience in selling pharmaceutical or other products or in manufacturing or procuring drug products in commercial quantities in compliance with FDA regulations and we have only limited experience in negotiating, establishing and maintaining collaborative relationships and conducting later stage phases of the regulatory approval process. Our ability to manage our growth, if any, will require us to improve and expand our management and our operational and financial systems and controls. If our management is unable to manage growth effectively, our business and financial condition would be adversely affected. In addition, if rapid growth occurs, it may strain our operational, managerial and financial resources, which are limited.

If we lose key management personnel or are unable to attract and retain the talent required for our business, our business could be materially harmed.

We currently have only one executive officer, Charles Muniz, our President, CEO and CFO. We are highly dependent on Mr. Muniz, who has an employment contract with us. During the fiscal year ended July 31, 2009, Kuslima Shogen, our scientific founder and former CEO retired, and Lawrence A. Kenyon, our former President, CFO and

Corporate Secretary, resigned.

We do not have key man insurance on any of our management. If we were to lose the services of Mr. Muniz or other members of our management team, and were unable to replace them, our product development and the achievement of our strategic objectives could be delayed.

In addition, our success will depend on our ability to attract and retain qualified commercial, scientific, technical, and managerial personnel. While we have not experienced unusual difficulties to date in recruiting and retaining personnel, there is intense competition for qualified staff and there is no assurance that we will be able to retain existing personnel or attract and retain qualified staff in the future.

We handle hazardous materials and must comply with environmental laws and regulations, which can be expensive and restrict how we do business. We could also be liable for damages, penalties, or other forms of censure if we are involved in a hazardous waste spill or other accident.

Our research and development processes involve the controlled storage, use, and disposal of hazardous materials and biological hazardous materials. We are subject to federal, state, and local laws and regulations governing the use, manufacture, storage, handling, and disposal of hazardous materials and certain waste products. Although we believe that our safety procedures for handling and disposing of these hazardous materials comply with the standards prescribed by law and regulation, the risk of accidental contamination or injury from hazardous materials cannot be completely eliminated. In the event of an accident, even by a third party, we could be held liable for any damages that result, and such liability could exceed the $2,000,000 limit of our current general liability insurance coverage and our financial resources. In the future, we may not be able to maintain insurance on acceptable terms, or at all. We could also be required to incur significant costs to comply with current or future environmental laws and regulations.

We may be sued for product liability.

Our business exposes us to potential product liability that may have a negative effect on our financial performance and our business generally. The administration of drugs to humans, whether in clinical trials or commercially, exposes us to potential product and professional liability risks which are inherent in the testing, production, marketing and sale of new drugs for humans. Product liability claims can be expensive to defend and may result in large judgments or settlements against us, which could have a negative effect on our financial performance and materially adversely affect our business. We maintain product liability insurance to protect our products and product candidates in amounts customary for companies in businesses that are similarly situated, but our insurance coverage may not be sufficient to cover claims. Furthermore, liability insurance coverage is becoming increasingly expensive and we cannot be certain that we will always be able to maintain or increase our insurance coverage at an affordable price or in sufficient amounts to protect against potential losses. A product liability claim, product recall or other claim, as well as any claim for uninsured liabilities or claim in excess of insured liabilities, may significantly harm our business and results of operations. Even if a product liability claim is not successful, adverse publicity and time and expense of defending such a claim may significantly interfere with our business.

Material weaknesses or deficiencies in our internal control over financial reporting could harm stockholders’ and business partners’ confidence in our financial reporting, our ability to obtain financing, and other aspects of our business.

Internal control over financial reporting can provide only reasonable and not absolute assurance that deficiencies or weaknesses are identified. Additionally, potential control deficiencies that are not yet identified could emerge and internal controls that are currently deemed to be in place and operating effectively are subject to the risk that those controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Identification and corrections of these types of potential control deficiencies could have a material impact on our business, financial position, results of operations and disclosures and impact our ability to raise funds.

Risks Related to Our Intellectual Property

Our proprietary technology and patents may offer only limited protection against infringement and the development by our competitors of competitive products.

We own two patents jointly with the United States government. These patents expire in 2016. We also own eighteen other United States patents with expiration dates ranging from 2013 to 2024, four European patents with expiration dates ranging from 2010 to 2019, three Japanese patents with expiration dates ranging from 2010 to 2016 and one Singaporean patent with an expiration date in 2024. Of the patents we own, five of the United States patents, two of the European patents and two of the Japanese patents have claims that cover ONCONASE® (by itself or together with other pharmaceuticals) or relevant manufacturing methodology. The scope of protection afforded by patents for biotechnological inventions is uncertain, and such uncertainty applies to our patents as well. Therefore, our patents may not give us competitive advantages or afford us adequate protection from competing products. Furthermore, others may independently develop products that are similar to our products, and may design around the claims of our patents. Patent litigation and intellectual property litigation are expensive and our resources are limited. To date, we have not received any threats of litigation regarding patent issues. However, if we were to become involved in litigation, we might not have the funds or other resources necessary to conduct the litigation effectively. This might prevent us from protecting our patents, from defending against claims of infringement, or both.

We may be sued for infringing on the intellectual property rights of others.

Our commercial success also depends in part on ensuring that we do not infringe the patents or proprietary rights of third parties. The biotechnology industry has produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of products. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. While we have not been sued for infringing the intellectual property rights of others, there can be no assurance that the drug product candidates that we have under development do not or will not infringe on the patent or proprietary rights of others. Third parties may assert that we are employing their proprietary technology without authorization. Moreover, United States patent applications filed in recent years are confidential for 18 months, while older applications are not published until the patent issues. Further, some applications are kept secret during the entire length of their pendency by request of the applicant in special circumstances. As a result, there may be patents of which we are unaware, and avoiding patent infringement may be difficult. Patent holders sometimes send communications to a number of companies in related fields, suggesting possible infringement. If we are sued for patent infringement, we would need to demonstrate that we either do not infringe the patent claims of the relevant patent and/or that the patent claims are invalid, which we may not be able to do. Proving invalidity, in particular, is difficult since it requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Parties making claims against us may be able to obtain injunctive or other equitable relief that could effectively block our ability to further develop, commercialize and sell products, and such claims could result in the award of substantial damages against us. In the event of a successful claim of infringement against us, we may be required to pay damages and obtain one or more licenses from third parties. We may not be able to obtain these licenses at a reasonable cost, if at all. In that event, we could encounter delays in product introductions while we attempt to develop alternative methods or products or be required to cease commercializing affected products and our operating results would be harmed.

In the future, others may file patent applications covering technologies that we may wish to utilize with our proprietary technologies, or products that are similar to products developed with the use of our technologies. If these patent applications result in issued patents and we wish to use the claimed technology, we would need to obtain a license from the third party, and this would increase our costs of operations and harm our operating results.

14

FORWARD LOOKING STATEMENTS

This prospectus includes forward looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “intend,” “expect” and similar expressi they relate to us, our business, or our management, are intended to identify forward looking statements. We have based these forward looking statements largely on our current expectations and projections about future events and financial trends affecting the financial condition of our business. These forward looking statements are subject to a number of risks, uncertainties and assumptions that may be beyond our control. All of our forward looking statements are qualified in their entirety by reference to the factors discussed in this prospectus under the heading “RISK FACTORS”that could cause results to differ materially from those projected in these forward looking statements.

We caution you that the risk factors contained herein are not exhaustive. We operate in a continually changing business climate which can be expected to impact our forward looking statements, whether as a result of new information, future events, or otherwise, after the date of this prospectus. In light of these risks and uncertainties, the forward looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially from those anticipated or implied in the forward looking statements. Accordingly, you should not rely on forward looking statements as a prediction of actual results.

USE OF PROCEEDS

Each of the Selling Security Holders will receive all of the net proceeds from the sale of shares by that holder. We will not receive any of the net proceeds from the sale of the shares. The Selling Security Holders will pay any underwriting discounts and commissions and expenses incurred by the Selling Security Holders for brokerage, accounting, tax or legal services or any other expenses incurred by the Selling Security Holders in offering or selling their shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, blue sky registration and filing fees, and fees and expenses of our counsel and accountants.

A portion of the shares covered by this prospectus are, prior to their sale under this prospectus, issuable upon conversion of the Notes or exercise of the Warrants. When the Notes are converted we will be relieved of our debt obligations for the Notes at the rate of $0.15 per share issued. Assuming that the Notes are converted on October 19, 2012, the maturity date of the Notes, and that interest will accrue at the rate of 5% through the maturity date, a total of $3,737,500 of principal and accrued interest would be converted into 24,916,667 shares of our common stock. If all of the Series A Warrants are exercised for cash at the exercise price of $0.15 per share, we will receive a total of $3,250,000 from such exercise. If all of the Series B Warrants are exercised for cash at the exercise price of $0.25 per share, we will receive a total of $5,416,666 from such exercise.

The Notes and Warrants were issued in a private placement which we closed in October 2009. We received proceeds from the Notes in the aggregate principal amount of $3,250,000 and assuming 100% exercise of the Warrants for cash, we will receive $8,666,666 from the payment of the exercise price. At the time of the private placement, we intended to use the proceeds for general corporate purposes, including the funding of research and development activities. The use of a portion of such proceedings is subject to certain limitations. In connection with our October 2009 private financing, we entered into an escrow agreement whereby certain investors placed $1.6 million of the proceeds paid for their units purchased in the financing in an escrow account. The escrow agreement will terminate on the earlier of the date that all funds have been disbursed from the escrow account and April 19, 2011, at which time any remaining funds will be disbursed to us. Such amounts can be disbursed from the escrow account only to satisfy obligations of ours owed to clinical research organizations, hospitals, doctors and other vendors and service providers associated with the clinical trials which we intend to conduct for our ONCONASE® product. Until such time that the escrow agreement terminates, we are not permitted to use the funds in the escrow account for any other purposes.

DETERMINATION OF OFFERING PRICE

The securities may be sold in one or more transactions at prevailing market prices at the time of the sale on the over-the counter bulletin board or at privately negotiated prices determined at the time of sale.

DILUTION

We are not selling any of the shares of common stock in this offering. All of the shares sold in this offering will be held by the Selling Security Holders at the time of the sale, so that no dilution will result from the sale of the shares.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read together with our consolidated financial statements and notes to those statements included in this prospectus.

Overview

We are a biopharmaceutical company engaged in the research, development, and commercialization of drugs for life threatening-diseases, such as malignant mesothelioma and other cancers. Our corporate strategy is to become a leader in the discovery, development, and commercialization of novel ribonuclease (RNase) therapeutics for cancer and other life-threatening diseases.

We are a development stage company as defined in Accounting Standards Codification (ASC) “Development Stage Entities”. We are devoting substantially all of our present efforts to establishing a new business and developing new drug products. Our planned principal operations of marketing and/or licensing new drugs have not commenced and, accordingly, we have not derived any significant revenue from these operations.

Since our inception in 1981, we have devoted the vast majority of our resources to the research and development of ONCONASE®, our lead drug candidate, as well as other related drug candidates. In recent years we have focused our resources towards the completion of the clinical program for ONCONASE® in patients suffering from unresectable malignant mesothelioma, or UMM.

During our fiscal year ended July 31, 2009, our efforts were primarily focused on the completion of our confirmatory Phase IIIb clinical trial for UMM and preparation of the remaining components of our NDA. The results of the preliminary statistical analysis of the data from the confirmatory Phase IIIb clinical trial for ONCONASE® in patients suffering from UMM did not meet statistical significance for the primary endpoint of survival in UMM. However, a statistically significant improvement in survival was seen in the treatment of UMM patients who failed one prior chemotherapy regimen, a currently unmet medical need and one of the predefined primary sub-group data sets for patients in the trial. At the pre-NDA meeting with the FDA in January 2009, the FDA recommended that an additional clinical trial be conducted in UMM patients that have failed one prior chemotherapy regimen, prior to filing an NDA. At this time, we do not expect to pursue further clinical trials for ONCONASE® for the UMM indication. We are evaluating which indications to pursue, including lung cancer and other solid tumors and currently we expect to use the proceeds we received from the private financing we closed in October 2009 to pursue a Phase II clinical trial of ONCONASE® for the treatment of non-small cell lung cancer in patients who have reached maximum progression on their current chemotherapy regimens.

We effected a reduction in force and reduced our operations to the minimum sustainable level required to pursue strategic alternatives and additional capital during the fiscal year ended July 31, 2009. Charles Muniz, a long time supporter and significant shareholder our company, was elected to our Board and appointed our President, CEO and CFO. Additional changes to our executive team during the fiscal year included the resignation of James Loughlin as a member of our Board and Chairman of the Audit Committee, resignation of Lawrence A. Kenyon as our President, CFO, Corporate Secretary and member of our Board and pursuant to a retirement agreement, Kuslima Shogen, our scientific founder, retired as our CEO and scientific founder. Ms. Shogen resigned from our Board in January 2010.

Almost all of the $72.6 million of research and development expenses we have incurred since our inception has gone toward the development of ONCONASE® and related drug candidates. For the fiscal years 2009, 2008 and 2007, our research and development expenses were approximately $3.3 million, $8.5 million, and $5.5 million, respectively, almost all of which were used for the development of ONCONASE® and related drug candidates.

We have incurred losses since inception and we have not received FDA approval of any of our drug candidates. We expect to continue to incur losses for the foreseeable future as we continue our efforts to receive marketing approval for our drug candidates, which includes the sponsorship of human clinical trials. Until we are able to consistently generate revenue through the sale of drug or non-drug products, we anticipate that we will be required to fund the development of our pre-clinical compounds and drug product candidates primarily by other means, including, but not limited to, licensing the development or marketing rights to some of our drug candidates to third parties, collaborating with third parties to develop our drug candidates, or selling Company issued securities.

We fund the research and development of our products primarily from cash receipts resulting from the sale of our equity securities and convertible debentures in registered offerings and private placements. Additionally, we have raised capital through other debt financings, the sale of our tax benefit and research products, interest income and financing received from Kuslima Shogen, our former CEO. During the fiscal year ended July 31, 2009, we received

gross proceeds of $13,220 from exercises of stock options and approximately $1.1 million from the sale of our tax benefit. In October 2009, we received a capital infusion of $3.25 million in gross proceeds from a private financing. These proceeds will be used to continue our operations, explore strategic alternatives and initiate a Phase II clinical study for non-small cell lung cancer in patients who have reached maximum progression on their current chemotherapy regimens. We have incurred losses since inception and, to date, we have generated only small amounts of capital from commercial agreements for ONCONASE®.

Results of Operations

Fiscal Year Ended July 31, 2009, as Compared to Fiscal Year Ended July 31, 2008

We are a development stage company as defined in ASC "Development Stage Entities." We are devoting substantially all our present efforts to establishing a new business and developing new drug products. Our planned principal operations of marketing of new drugs have not commenced and, accordingly, we have not derived any significant revenue from these operations. We focus most of our productive and financial resources on the development of ONCONASE®. We did not record any revenue in fiscal years 2009 or 2008.

Research and development expense for fiscal year 2009 was $3.3 million compared to $8.5 million for fiscal year 2008, a decrease of approximately $5.2 million, or 61.6%. The decrease was primarily due to decreased expenses of approximately $4.2 million related to costs incurred for the ONCONASE® rolling NDA submission of our confirmatory Phase IIIb ONCONASE® clinical trial for malignant mesothelioma; decreased compensation expense of approximately $0.7 million, due to the reduction in force; and a decrease of approximately $0.3 million in expenses due to the completion of the Phase I component of our Phase I/II ONCONASE® clinical trials.

General and administrative expense for fiscal year 2009 was approximately $2.4 million compared to approximately $5.8 million for fiscal year 2008, a decrease of approximately $3.4 million, or 58%. This decrease was primarily due to decreased compensation expense of approximately $2.4 million directly related to the retirement agreement executed by Kuslima Shogen, our former CEO in fiscal year 2008, the resignation of our President and CFO in fiscal 2009 and share-based compensation. Additionally, a decrease in professional fees for consultants and legal advisors of approximately $0.9 million was related to negotiations that resulted in commercial partnerships for ONCONASE® in fiscal year 2008 and reduced operations in fiscal year 2009. Other general and administrative expenses also decreased by approximately $0.1 million.

Investment income for fiscal year 2009 was approximately $26,000 compared to $228,000 for fiscal year 2008, a decrease of $202,000. The decrease was due to lower balances of cash and cash equivalents on hand during the fiscal year 2009 as compared to the same period in 2008.

New Jersey has enacted legislation permitting certain corporations located in New Jersey to sell a portion of its state tax loss carryforwards and state research and development credits in order to obtain tax benefits. For the state fiscal year 2009 (July 1, 2008 to June 30, 2009), we had approximately $1,274,000 of total available state tax benefit that was saleable. On December 1, 2008, we received approximately $1,140,000 from the sale of our total available state tax benefit, which was recognized as state tax benefit in the fiscal year ended July 31, 2009.

We have incurred net losses during each year since our inception. The net loss for fiscal year 2009 was approximately $4.5 million as compared to $12.3 million in fiscal year 2008. The decreased net loss was primarily related to the decreased research and development expenses incurred in 2009 as compared to 2008. The cumulative loss from the date of inception, August 24, 1981 to July 31, 2009, amounted to $108.9 million. Such losses are attributable to the fact that we are still in the development stage and, accordingly, have not derived sufficient revenues from operations to offset the development stage expenses.

Fiscal Year Ended July 31, 2008, as Compared to Fiscal Year Ended July 31, 2007

We did not record any revenue in fiscal years 2008 and 2007.

Research and development expense for fiscal year 2008 was $8.5 million compared to $5.5 million for fiscal year 2007, an increase of approximately $3 million, or 53.4%. The increase in research and development expenses is

directly related to increased expenses of approximately $3.2 million related to our preparations for the completion of the ONCONASE® rolling NDA submission, which included the required statistical analysis of the data from our confirmatory Phase IIIb clinical trial, offset by a decrease of approximately $0.2 million in expenses incurred from the completion of the Phase I component of our Phase I/II ONCONASE® clinical trials.

General and administrative expense for fiscal year 2008 was approximately $5.8 million compared to approximately $4.1 million for fiscal year 2007, an increase of approximately $1.7 million, or 41.6%. This increase was primarily the result of increased compensation expense of approximately $1.1 million directly related to the planned retirement of Kuslima Shogen, our former CEO, in 2009. Additionally, professional service fees for consultants and legal advisors increased approximately $0.5 million as a result of our increased activity in pursuing and negotiating commercial agreements in fiscal year 2008. Other general and administrative expenses increased by a total of approximately $0.1 million in 2008 as a result of increased commercial insurance premiums.

Investment income for fiscal year 2008 was $0.2 million compared to $0.4 million for fiscal year 2007, a decrease of $0.2 million. The decrease was due to lower balances of cash and cash equivalents on hand during the fiscal year 2008 as compared to the same period in 2007.

New Jersey has enacted legislation permitting certain corporations located in New Jersey to sell a portion of its state tax loss carryforwards and state research and development credits in order to obtain tax benefits. For the state fiscal year 2008 (July 1, 2007 to June 30, 2008), we had approximately $2.5 million of total available state tax benefits that qualified for sale, of which New Jersey permitted us to sell approximately $2.0 million. In December 2007, we received approximately $1.8 million from the sale of these state tax benefits, which was recognized as state tax benefit in the fiscal year ended July 31, 2008.

For the state fiscal year 2007 (July 1, 2006 to June 30, 2007), we had approximately $2.3 million of total available state tax benefits that qualified for sale, of which New Jersey permitted us to sell approximately $0.6 million. In December 2006, we received approximately $0.5 million from the sale of these state tax benefits, which was recognized as state tax benefit in the fiscal year ended July 31, 2007.

The net loss for fiscal year 2008 was $12.3 million as compared to $8.8 million in fiscal year 2007.

Six-Month Period Ended January 31, 2010, as Compared to Six-Month Period Ended January 31, 2009

We focus most of our productive and financial resources on the development of ONCONASE® and as such, except for the sales for the six month period ended January 31, 2010 in the amount of $18,750 which resulted from the sale on a named-patient basis of our product ONCONASE® as approved by the Swiss government, we did not have any material sales in the six month periods ended January 31, 2010 and 2009.

Research and development expense for the six month period ended January 31, 2010 was approximately $0.3 million compared to approximately $2.8 million for the same period in 2009, a decrease of approximately $2.5 million, or 90%. The decrease was primarily related to decreased expenses of approximately $1.8 million related to costs incurred for the ONCONASE® rolling NDA submission for our Phase IIIb clinical trial for malignant mesothelioma and decreased compensation expense of approximately $0.7 million from the reduction in force and decreased stock-based compensation.

General and administrative expense for the six month period ended January 31, 2010 was approximately $0.8 million compared to $1.8 million for the same period in 2009, a decrease of $1.0, or 54%. This decrease was primarily due to decreased compensation expense of approximately $0.7 million from decreased stock-based compensation expense, the retirement of Kuslima Shogen, our former CEO and the resignation of Lawrence Kenyon, our former CFO. Public relations related costs and other general administrative expenses also decreased by approximately $0.3 million due to our reduced operations in fiscal year 2010.

Interest expense for the six month period ended January 31, 2010 increased by approximately $5.9 million compared to the same period last year. This increase was directly due to the beneficial conversion feature of the

convertible debenture and warrants we issued in October 2009 and the original recognition of and the change in valuation of the derivative liability.

New Jersey permits certain corporations located in New Jersey to sell a portion of their state tax loss carryforwards and state research and development credits, or state tax benefit. For the state fiscal year 2010 (July 1, 2009 to June 30, 2010, we had approximately $723,000 of total available state tax benefit that was saleable. On February 8, 2010, we received approximately $647,000 from the sale of our total available state tax benefit, which will be recognized as state tax benefit in the period it was received. For the state fiscal year 2009 (July 1, 2008 to June 30, 2009), we had approximately $1,274,000 of total available state tax benefit that was saleable. On December 1, 2008, we received approximately $1,140,000 from the sale of our total available state tax benefit, which was recognized as state tax benefit for the six months ended January 31, 2009.

The net loss for the six month period ended January 31, 2010 was approximately $6.9 million as compared to $3.5 million for the same period last year, an increase of $3.4 million. The cumulative loss from the date of inception, August 24, 1981 to January 31, 2010, amounted to $115.9 million. We have incurred net losses during each year since our inception. Such losses are attributable to the fact that we are still in the development stage and, accordingly, have not derived sufficient revenues from operations to offset our development stage expenses.

Liquidity and Capital Resources

We have reported cumulative net losses of approximately $25.6 million for the three most recent fiscal years ended July 31, 2009. The net losses from date of inception, August 24, 1981, to January 31, 2010 amount to approximately $115.9 million. As of January 31, 2010, we have a working capital deficit of approximately $10.5 million.

We have financed our operations since inception primarily through the sale of our equity securities and convertible debentures in registered offerings and private placements. Additionally, we have raised capital through other debt financings, the sale of our state tax benefit and research products, and investment income and financing received from Kuslima Shogen, our former CEO. As of January 31, 2010, we had approximately $0.7 million in cash and cash equivalents. We currently believe that our cash reserves including the proceeds received in February 2010 from the sale of our state tax benefit of approximately $0.6 million and the $1.6 million restricted cash intended for future clinical trials can support our activities through July 2010, based upon our reduced operations.

The primary use of cash over the next six months will be to fund our clinical and pre-clinical research and development efforts for ONCONASE®. The most significant expenses will be incurred for the currently planned Phase II clinical study for non-small cell lung cancer. Additional expenses are also expected to be incurred as we continue to move our drug product candidates towards the next phase of clinical and pre-clinical development. We will need to obtain additional financing in order to continue our operations. Given current market conditions, it may be very difficult, if not impossible, to obtain such financing. If we are not able to obtain additional financing, in order to continue our operations we will need to pursue strategic alternatives for the further development of ONCONASE®.

The audit report of our independent registered public accounting firm on our fiscal year ended July 31, 2009 financial statements expressed that there was substantial doubt about our ability to continue as a going concern. Continued operations are dependent on our ability to raise additional capital from various sources such as those described above. Such capital raising opportunities may not be available or may not be available on reasonable terms. Our financial statements do not include any adjustments that may result from the outcome of this uncertainty.

Off-Balance Sheet Arrangements

We have no off-balance sheet debt, no exposure to off-balance sheet arrangements, no special purpose entities, nor activities that include non-exchange-traded contracts accounted for at fair value as of January 31, 2010.

Contractual Obligations and Commercial Commitments

Our major outstanding contractual obligations relate to our building and equipment operating leases. During the fiscal year ended July 31, 2008, we entered into an equipment capital lease which obligates us to pay $635 per month for five years and during the fiscal year ended July 31, 2007, we entered into separate building and equipment operating leases, which obligates us to pay an average of $25,393 per month for the building and $1,866 per month for the equipment for ten and five years, respectively. Below is a table that presents our contractual obligations and commercial commitments as of July 31, 2009:

	Payments Due in Fiscal Year

	Total	2010	2011	2012	2013	2014	2015 and Thereafter
Building lease	$ 2,750,685	$ 302,036	$ 317,446	$ 317,446	$ 317,446	$ 332,856	$ 1,163,455
Equipment lease	83,612	31,024	25,976	25,976	636	-	-
Total Contractual cash obligations	$ 2,834,297	$ 333,060	$ 343,422	$ 343,422	$ 318,082	$ 332,856	$ 1,163,455

On January 15, 2010, Charles Muniz, our President and CEO, as an individual, entered into a quarterly lease agreement with I&G Garden State, LLC or I&G for new office on the fourth floor of 300 Atrium Drive, Somerset, NJ, which space we will occupy as our new office. The lease expires on June 30, 2010, renewable for successive three-month periods upon thirty days prior notice and payment of $15,790.50 for the following three months' rent. Since the beginning of the lease term, we have been paying the quarterly rent payments directly to I&G.

In January 2010, we vacated our old facility pursuant to the complaint filed by our landlord, I&G in November 2009. In February 2010, I&G withdrew the remaining balance of the Company's secured irrevocable letter of credit which was placed in March 2007 in the amount of approximately $81,000. On February 5, 2010, our former landlord, I&G, commenced an action against us. The lawsuit seeks unspecified damages for an alleged breach of a lease agreement dated March 14, 2007 between the Company and I&G. We intend to vigorously defend this action.

Critical Accounting Policies

In December 2001, the SEC requested that all registrants discuss their most "critical accounting policies" in Item 7 - Management's Discussion and Analysis of Financial Condition and Results of Operations. The SEC indicated that a "critical accounting policy" is one which is both important to the portrayal of the company's financial condition and results and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. The accounting policies set forth below have been considered critical because changes to certain judgments, estimates and assumptions could significantly affect our financial statements.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles or GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reporting period. Actual results could differ from those estimates.

Cash Equivalents

We consider all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The carrying value of these investments approximates their fair market value due to their short maturity and liquidity.

Property and Equipment

Property and equipment is recorded at cost and is depreciated using the straight-line method over the estimated useful lives of the respective assets. Maintenance and repairs that do not extend the life of assets are charged to expense when incurred. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is included in operations for the period in which the transaction takes place.

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate 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 an asset to estimated undiscounted cash flows expected to be generated by the asset. If the carrying amount exceeds its estimated future cash flows, an impairment charge is recognized by the amount by which the carrying amount exceeds the fair value of the asset.

21

Income Taxes

Income taxes are accounted for under the provisions of ASC "Accounting for Income Taxes". Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Management provides valuation allowances against the deferred tax assets for amounts which are not considered “more likely than not” to be realized.

Revenue Recognition

We recognize revenue in accordance with Staff Accounting Bulletin (SAB) No. 104, “Revenue Recognition,” issued by the staff of the SEC. Under SAB No. 104, revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred and/or services have been rendered, the sales price is fixed or determinable, and collectibility is reasonably assured.

We enter into marketing and distribution agreements, which contain multiple deliverables. Under the provisions of “Accounting for Revenue Arrangements with Multiple Deliverables,” we evaluate whether these deliverables constitute separate units of accounting to which total arrangement consideration is allocated. A deliverable qualifies as a separate unit of accounting when the item delivered to the customer has standalone value, there is objective and reliable evidence of fair value of items that have not been delivered to the customer, and, if there is a general right of return for the items delivered to the customer, delivery or performance of the undelivered items is considered probable and substantially in the control of the company. Arrangement consideration is allocated to units of accounting on a relative fair-value basis or the residual method if the company is unable to determine the fair value of all deliverables in the arrangement. Consideration allocated to a unit of accounting is limited to the amount that is not contingent upon future performance by the company. Upon determination of separate units of accounting and allocated consideration, the general criteria for revenue recognition are applied to each unit of accounting.

Research and Development

Research and development costs are expensed as incurred. These costs include, among other things, consulting fees and costs related to the conduct of human clinical trials. We also allocate indirect costs, consisting primarily of operational costs for administering research and development activities, to research and development expenses.

Share-Based Compensation

In December 2004, the Financial Accounting Standards Board issued amended guidance on accounting for “Stock Compensation”. The amended guidance requires all share-based payments, including stock option grants to employees, to be recognized as an operating expense in the statement of operations. The expense is recognized over the requisite service period based on fair values measured on the date of grant. We adopted the amended guidance on Stock Compensation effective August 1, 2005 using the modified prospective method and, accordingly, prior period amounts have not been restated. Under the modified prospective method, the fair value of all new stock options issued after July 31, 2005 and the unamortized fair value of unvested outstanding stock options at August 1, 2005 are recognized as expense as services are rendered.

Leases

With respect to our operating leases, we apply the provisions of ASC “Accounting for Leases”, recognizing rent expense on a straight-line basis over the lease term due to escalating lease payments and landlord incentives.

Contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated. Recoveries from other parties are recorded when realized.

Fair Value of Financial Instruments

Financial instruments consist of cash, cash equivalents, accounts receivable, and accounts payable. The carrying value of these financial instruments is a reasonable estimate of fair value.

Recently Issued Accounting Pronouncements

In June 2009, the Financial Accounting Standards Board (FASB) issued the FASB Accounting Standards Codification (the "Codification"). Effective July 1, 2009, the Codification became the single source of authoritative nongovernmental U.S. generally accepted accounting principles (GAAP), superseding existing rules and related literature issued by the FASB, American Institute of Certified Public Accountants (AICPA) and Emerging Issues Task Force (EITF). The Codification also eliminates the previous U.S. GAAP hierarchy and establishes one level of authoritative GAAP. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. All other literature is considered non-authoritative. The Codification, which has not changed GAAP, was effective for interim and annual periods ended after September 15, 2009. The Company adopted the Codification for the quarter ended October 31, 2009. Other than the manner in which accounting guidance is referenced, the adoption of the Codification had no impact on the Company's financial statements.

In December 2007, the FASB issued new accounting guidance related to the accounting for business combinations and related disclosures. This guidance establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, any noncontrolling interest in the acquiree, and any goodwill acquired in a business combination. It also establishes disclosure requirements to enable the evaluation of the nature and financial effects of a business combination. The guidance is to be applied prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. The Company adopted this guidance, effective August 1, 2009, and it did not have any effect on the Company's financial statements.

In February 2008, the FASB issued amended guidance to delay the fair value measurement and expanded disclosures about fair value measurements for nonfinancial assets and nonfinancial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis (at least annually), until fiscal years beginning after November 15, 2008. Effective August 1, 2009, the Company adopted the guidance related to fair value measurements for nonfinancial assets and nonfinancial liabilities and the adoption of such guidance did not have any effect on the Company's financial statements.

In June 2008, the FASB issued guidance for determining whether an equity-linked financial instrument (or embedded feature) is indexed to an entity's own stock, which would qualify as a scope exception to derivative classification under ASC Topic 815, "Derivatives and Hedging". The guidance is effective for fiscal years beginning after December 15, 2008 and early adoption for an existing instrument is not permitted. The Company adopted this guidance, effective August 1, 2009. The adoption had no impact on the Company's previously accounted for equity-linked financial instruments that were considered to be indexed to its own equity. Refer to Note 6 for the result of the adoption on the equity-linked instruments included within the Securities Purchase Agreement entered into on October 19, 2009.

In May 2009, the FASB issued guidelines on subsequent event accounting which sets forth: (1) the period after the balance sheet date during which management of a reporting entity should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements; (2) the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements; (3) the disclosures that an entity should make about events or transactions that occurred after the balance sheet date and (4) requires the reporting entity to evaluate subsequent events through the date the financial statements are issued. The

Company adopted these amendments for the fiscal year ended July 31, 2009 and determined that it did not have a material impact on the Company's financial statements. The Company evaluated all events or transactions that occurred after January 31, 2010 through the date the financial statements were issued.

In August 2009, the FASB issued amended guidance on the measurement of liabilities at fair value. The guidance provides clarification that in circumstances in which a quoted market price in an active market for an identical liability is not available, the fair value of a liability be measured using one or more of the valuation techniques that uses the quoted price of an identical liability when traded as an asset or, if unavailable, quoted prices for similar liabilities or similar assets when traded as assets. If none of this information is available, an entity should use a valuation technique in accordance with existing fair valuation principles. This guidance is effective for the first reporting period (including interim periods) after issuance. The Company adopted this guidance in the quarter ended October 31, 2009. The adoption had no impact on the Company's financial statements.

In October 2009, the FASB issued amended guidance for separating consideration in multiple-deliverable arrangements. It eliminates the requirement under previous guidance that all undelivered elements have vendor-specific objective evidence (VSOE) or third-party evidence (TPE) of fair value before recognizing a portion of revenue related to the delivered items, and establishes that revenue be allocated to each element based on its relative selling price, as determined by VSOE, TPE, or the entity's estimated selling price if neither of the aforementioned is available. Additionally, the amended guidance eliminates the residual method of allocation and expands required disclosures about multiple-element revenue arrangements. It will be effective prospectively for revenue arrangements entered into beginning January 1, 2011, with early adoption permitted.

CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

There have been no changes in or disagreements with accountants on accounting or financial disclosures in the past two fiscal years and the subsequent interim period thereafter.

On December 1, 1993, certain stockholders of Armus Harrison & Co., or AHC, terminated their association with AHC, or the AHC termination, and AHC ceased performing accounting and auditing services, except for limited accounting services to be performed on our behalf. In June 1996, AHC dissolved and ceased all operations. The report of J.H. Cohn LLP with respect to our financial statements from inception to July 31, 2008 is based on the report of KPMG LLP from August 1, 1992 to July 31, 2002 and of AHC for the period from inception to July 31, 1992, although AHC has not consented to the use of such report herein and will not be available to perform any subsequent review procedures with respect to such report. Accordingly, investors will be barred from asserting claims against AHC under Section 18 of the Exchange Act on the basis of the use of such report in any Annual Report on Form 10-K into which such report is incorporated by reference. In addition, in the event any persons seek to assert a claim against AHC for false or misleading financial statements and disclosures in documents previously filed by us, such claim will be adversely affected and possibly barred. Furthermore, as a result of the lack of a consent from AHC to the use of its audit report herein, or to its incorporation by reference into an Annual Report on Form 10-K, our officers and directors will be unable to rely on the authority of AHC as experts in auditing and accounting in the event any claim is brought against such persons under Section 18 of the Exchange Act based on alleged false and misleading Financial Statements and disclosures attributable to AHC. The discussion regarding certain effects of the AHC termination is not meant and should not be construed in any way as legal advice to any party and any potential purchaser should consult with his, her or its own counsel with respect to the effect of the AHC termination on a potential investment in our common stock or otherwise

QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to market risks, primarily changes in U.S. interest rates. As of January 31, 2010, we held total cash and cash equivalents of approximately $0.7 million. All cash equivalents have a maturity less than 90 days. Declines in interest rates over time would reduce our interest income from our investments.

CONTROLS AND PROCEDURES

(a) Evaluation of disclosure controls and procedures.

Under the supervision and with the participation of our management, including our CEO and CFO, we evaluated the effectiveness of the design and operation of our "disclosure controls and procedures" (as defined in Rule 13a-15(e) under the Exchange Act), as of January 31, 2010, the end of our most recently completed fiscal quarter. Based on this evaluation, our CEO and CFO concluded that our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded,

processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission including without limitation, controls and procedures that are designed to ensure that the information required to be disclosed in reports by us that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely discussion regarding required disclosures.

(b) Changes in internal controls.

There have been no changes in our internal control over financial reporting during the quarter ended January 31, 2010 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting subsequent to the date of the evaluation referred to above.

BUSINESS

BUSINESS OVERVIEW

Tamir Biotechnology, Inc. is a Delaware corporation initially incorporated on August 24, 1981 under the name of Alfacell Corporation. The Company changed its name to Tamir Biotechnology, Inc. on April 27, 2010. We are a biopharmaceutical company primarily engaged in the discovery and development of a new class of therapeutic drugs for the treatment of cancer and other pathological conditions. Our proprietary drug discovery and development program consists of novel therapeutics which is being developed from amphibian ribonucleases (RNases).

RNases are biologically active enzymes that split RNA molecules. RNases are enzymes which play important roles in nature, including the embryonic development of an organism and regulation of various cell functions. RNA is an essential bio-chemical cellular component necessary to support life. There are various types of RNA, all of which have specific functions in a living cell. They help control several essential biological activities, namely; regulation of cell proliferation, maturation, differentiation and cell death. Therefore, they are believed to be good candidates for the development of therapeutics for cancer and other life-threatening diseases, including HIV and autoimmune diseases, that require anti-proliferative and apoptotic, or programmed cell death, properties.

ONCONASE® (ranpirnase) is a novel amphibian ribonuclease, unique among the superfamily of pancreatic ribonuclease, isolated from the eggs of the Rana pipiens (the Northern Leopard frog). Ranpirnase is the smallest known protein belonging to the superfamily of pancreatic ribonuclease and has been shown, on a molecular level, to re-regulate the unregulated growth and proliferation of cancer cells. Unlike most anti-cancer agents that attack all cells regardless of phenotype (malignant versus normal) and cause severe toxicities, ONCONASE® is not an indiscriminate cytotoxic drug (cell killing agent). ONCONASE® primarily affects exponentially growing malignant cells, with activity controlled through unique and specific molecular mechanisms.

The molecular mechanisms which determine the apoptotic cell death induced by ranpirnase have been identified. tRNA (transfer RNA), rRNA (ribosomal RNA), mRNA (messenger RNA) and miRNA (micro RNA) are all different types of RNA with specific functions in a living cell. Ranpirnase preferentially degrades tRNA and targets miRNA, leaving rRNA and mRNA apparently undamaged. The RNA damage induced by ranpirnase appears to represent a “death signal”, or triggers a chain of molecular events culminating in the activation of proteolytic enzyme cascades which, in turn, induces disintegration of the cellular components and finally leads to cell death. It has been shown that there is a protein synthesis inhibition-independent component, which, together with the changes induced by the protein synthesis inhibition, results in tumor cell death.

ONCONASE®, our lead drug product candidate, has been evaluated in human clinical trials for the treatment of various forms of cancer. Our most recent clinical trial for ONCONASE® was a confirmatory Phase IIIb registration trial that was designed to evaluate the efficacy, safety and tolerability of the combination of ONCONASE® and doxorubicin as compared to doxorubicin alone in the treatment of patients with unresectable (inoperable) malignant mesothelioma or UMM, a rare and deadly form of lung cancer. Enrollment in the Phase IIIb trial was completed in September 2007. In May 2008, we reported that the preliminary statistical analysis of data from our ONCONASE® confirmatory Phase IIIb clinical trial did not meet statistical significance for the primary endpoint of survival in UMM. However, a statistically significant improvement in survival was seen in the treatment of UMM patients who failed one prior chemotherapy regimen, a predefined primary data set for this sub-group of patients in the trial, which represents a currently unmet medical need. The Food and Drug Administration or the FDA, recommended that an additional clinical trial be conducted in UMM patients that have failed one prior chemotherapy regimen, prior to filing a New Drug Application or NDA. At this time we do not expect to pursue further clinical trials for ONCONASE® for the UMM indication. We are evaluating which indications to purse, including lung cancer and other solid tumors and currently we expect to use the proceeds we received from the private financing we closed in October 2009 to pursue a

Phase II clinical trial of ONCONASE® for the treatment of non-small cell lung cancer in patients who have reached maximum progression on their current chemotherapy regimens.

We believe that ONCONASE®, as well as another group of our amphibian RNases known as Amphinases, may also have applications in a variety of other areas in addition to those being investigated currently in our clinical development program. Amphinase is currently in the pre-clinical research and development stage.

We are a development stage company as defined in the ASC "Development Stage Entities." We are devoting substantially all of our present efforts to establishing a new business and developing new drug products. Our planned principal operations of marketing and/or licensing new drugs have not commenced and, accordingly, we have not derived any significant revenue from these operations.

MARKET OVERVIEW

According to the American Cancer Society (ACS) 2009 Cancer Facts and Figures, cancer is the second leading cause of death in the United States, accounting for one in every four deaths. The ACS 2009 Cancer Facts and Figures also estimates that doctors will diagnose over 1.5 million new cases of cancer in the United States in 2009. The National Institutes of Health or NIH estimate that the annual cost of cancer in 2008 was approximately $228.1 billion, including $93.2 billion in direct medical costs and $18.8 billion for morbidity costs, which includes the cost of lost productivity.

Cancer is characterized by uncontrolled cell division resulting in the growth of a mass of cells commonly known as a tumor. Cancerous tumors can arise in almost any tissue or organ and cancer cells, if not eradicated, spread, or metastasize, throughout the body. Cancer is believed to occur as a result of a number of factors, including hereditary and environmental factors.

For the most part, cancer treatment depends on the type of cancer and the stage of disease progression. Generally, staging is based on the size of the tumor and whether the cancer has metastasized or spread. Following diagnosis, solid tumors are typically surgically removed or the patient is given radiation therapy. Chemotherapy is the principal treatment for tumors that are likely to, or have, metastasized. Chemotherapy involves the administration of drugs which are designed to kill cancer cells, affect the growth of tumors, or reduce bloodflow to tumors, in an effort to reduce or eliminate cancerous tumors.

Because in most cases cancer is fatal, cancer specialists attempt to attack the cancer aggressively, with as many therapies as available and with as high a dose as the patient can tolerate. Since traditional chemotherapy attacks both normal and cancerous cells, treatment often tends to result in complicating side effects. Additionally, cells which have been exposed to several rounds of chemotherapy develop a resistance to the cancer drugs that are being administered. This is known as "multi-drug resistance." The side effects of chemotherapy often limit the effectiveness of treatment. Cancers often recur and mortality rates remain high. Despite large sums of money spent on cancer research, current treatments are largely inadequate and improved anti-cancer agents are needed.

We believe that the products we currently have under development could be used to target a broad range of solid tumors. The table below shows the incidence and mortality estimated for the year 2009 for various types of solid tumor cancers that our products could be designed to treat:

Cancer Indication	New Cases	Deaths
Lung	219,440	159,390
Breast	194,280	40,610
Brain	22,070	12,920
Esophageal	16,470	14,530

Source: National Cancer Institute

COMPETITION

There are many companies with resources significantly greater than ours that are currently marketing approved drug products that treat, and are developing new drug products that are designed to treat, several of the cancers that we may seek to treat with our products. The drug products currently marketed or developed by these companies may prove to be more effective that the products we seek to develop.

We are not aware, however, of any product currently being marketed that has the same mechanism of action as our proposed anti-tumor agent, ONCONASE®. Search of scientific literature reveals no published information that would indicate that others are currently employing this method or producing such an anti-tumor agent. However, we cannot assure you that others may not develop new treatments that are more effective than ONCONASE®.

BUSINESS STRATEGY

Our goal is to become a leading biopharmaceutical company focused on discovering and developing innovative anti-cancer treatments based on our proprietary RNase technology platform. Our strategy consists of the following key elements:

Focus on the growing cancer market

Cancer is the second leading cause of death in the United States, yet there remain unmet needs, and current treatments remain ineffective and inadequate for some populations. Given the life-threatening nature of cancer, the FDA has adopted procedures to accelerate the approval of cancer drugs. We intend to continue to use our expertise in the field of cancer research to target this significant market opportunity for cancer drug development.

Develop our existing product portfolio

We currently have a portfolio of clinical and pre-clinical drug product candidates under development for potential use as anti-cancer, and other therapeutics. We intend to further develop these drug product candidates both by utilizing our internal resources and by continuing to collaborate with other companies and leading governmental and academic research institutions.

Commercialize pharmaceutical products focused on cancer in selected markets

Our current strategy is to partner with third parties to market our future products to oncologists and other key specialists involved in the treatment of cancer patients. We may also elect to develop an appropriately-sized internal oncology sales and marketing capability in the United States. This group may function as a standalone operation or in a supportive, co-promotion capacity in collaboration with a partner.

RESEARCH AND DEVELOPMENT PROGRAM

Research and development expenses for the fiscal years ended July 31, 2009, 2008 and 2007 were approximately $3,268,000, $8,503,000 and $5,543,000, respectively. Our research and development programs focus primarily on the clinical and pre-clinical research and development of therapeutics from our pipeline of amphibian RNases.

Clinical Development Program

ONCONASE® was most recently evaluated as a treatment for UMM in an international, centrally randomized, confirmatory Phase IIIb registration trial. Malignant mesothelioma is a rare cancer, primarily affecting the pleura (lining of the lungs), and is usually associated with asbestos exposure. The first Phase III trial of ONCONASE® in UMM was completed in 2000. The most recent confirmatory Phase IIIb registration trial was closed to patient accrual in September 2007.

The confirmatory Phase IIIb registration trial was a randomized and controlled clinical trial designed to evaluate the efficacy, safety and tolerability of the combination of ONCONASE® and doxorubicin as compared to doxorubicin alone, and powered to reach a statistically significant difference in overall survival between the ONCONASE® +

doxorubicin treatment group and the doxorubicin treatment group at 316 evaluable events. Patients were stratified based on Cancer Adult Leukemia Group B (CALGB) Group (1 to 4) and histology and then assigned treatment using a centralized randomization plan. The primary endpoint of the trial was overall patient survival. The following data sets were analyzed for efficacy as per the statistical analysis plan for this clinical trial:

- All patients randomized who received at least one dose of study therapy (evaluable patients),
- Previously treated patients,
- All patients randomized,
- All patients who completed 6 cycles of therapy per protocol, and
- All patients with identical inclusion criteria as used in the Alimta submission.

In addition, secondary endpoints that were analyzed in accordance with the Phase IIIb clinical trial statistical analysis plan included:

- Tumor response rates,
- Progression free survival,
- Patient assessment of symptoms associated with malignant mesothelioma,
- Investigator assessment of malignant mesothelioma symptoms,
- Narcotic pain medication usage,
- Lung function, and
- Performance status.

In May 2008, we reported that the results of the preliminary statistical analysis of data from our ONCONASE® confirmatory Phase IIIb clinical trial did not meet statistical significance for the primary endpoint of survival in UMM. However, a statistically significant improvement in survival was seen in the treatment of UMM patients who failed one prior chemotherapy regimen, one of the predefined primary sub-group data sets for patients in the trial, which represents a currently unmet medical need. At the pre-NDA meeting with the FDA in January 2009, the FDA recommended that an additional clinical trial be conducted in UMM patients that have failed one prior chemotherapy regimen, prior to filing an NDA.

A Phase I/II program to evaluate a new dose and administration schedule of ONCONASE® was initiated in 2005 to attempt to take advantage of potentially increased efficacy with higher and more frequent doses of ONCONASE®. The Phase I portion of this program is complete and currently, we plan to initiate a Phase II clinical trial in non-small cell lung cancer (NSCLC) for patients who have reached maximum progression on their current chemotherapy regimens in 2010.

Pre-Clinical Research Program

Our drug discovery and pre-clinical research programs form the basis for the development of specific recombinant RNases for chemically linking drugs and other compounds such as monoclonal antibodies, growth factors, etc., as well as developing gene fusion products with the goal of targeting various molecular functions. These programs provide for joint design and generation of new products with outside collaborators. Through these collaborations, we may own these new products along with, or we may grant an exclusive license to, the collaborating partner(s).

The multiple effects of biological activity of ONCONASE® has led to research in other areas of cancer biology. Two important areas associated with significant market opportunities are radiation therapy and control of tumor angiogenesis, or new tumor blood vessel formation. Many types of cancers undergo radiation therapy at early stages of the disease; however, success of such treatment is often limited. We believe any agent capable of enhancing tumor radiosensitivity has great market potential. Moreover, since the growth of essentially all types of cancer is dependent on new blood vessel formation, any agent that has anti-angiogenic activity, we believe, is most desirable.

Ranpirnase Conjugates and Fusion Proteins

The concept of targeting potent toxins as effector molecules to kill cancer or other specifically targeted cells has been extensively evaluated over the last two decades. An immunotoxin is an antibody linked to a toxic molecule that is used to destroy specific cells. Several immunotoxins containing bacterial and plant toxins or other biotoxins, have been evaluated in human clinical trials. Efficacy has always been limited due to the high incidence of immunogenicity, or an immune response, and other intolerable toxicities, including death. Conjugation of ranpirnase to targeting ligands, or binding to other molecules, appears to eliminate this safety problem in pre-clinical studies.

A Cooperative Research and Development Agreement (CRADA) with the National Cancer Institute, or NCI, has produced RN321, a conjugate of ranpirnase with a monoclonal antibody that has demonstrated activity against non-Hodgkin's lymphoma in preclinical studies. The relative benefit of killing targeted tumor cells versus non-targeted healthy cells, or the therapeutic index, is greater than 200,000-fold with this conjugate. This CRADA has been concluded and data published.

We have also developed a variety of uniquely designed versions of ONCONASE® and amphinase conjugates. These compounds target the EGF receptors and neo-vascularization (tumor blood vessel formation) which have potential clinical application in a broad spectrum of solid tumors.

Novel Amphibian Ribonucleases (Amphinases)

We have also discovered another series of proteins, collectively named amphinases that may have therapeutic uses. These proteins are bioactive in that they have an effect on living cells and organisms and have both anti-cancer and anti-viral activity. All of the proteins characterized to date are RNases. Preclinical testing of the new candidates collectively called amphinases showed them to be similarly active to ranpirnase. Their chemical structure makes them ideal candidates for genetic engineering of designer products.

These compounds have undergone screening by the National Institute of Allergy and Infectious Diseases (NIAID) against various RNA viruses and by outside collaborators. One of these compounds, AC-03-636 has been determined to be active in yellow fever, Hepatitis C and Dengue fever. The same compound has been evaluated at Johns Hopkins University in a sustained time release formulation for the treatment of brain tumors, or gliomas.

Evaluation Of ONCONASE® As A Radiation Enhancer

The p53 gene is a tumor-suppressor gene, which means that if it malfunctions, tumors may be more likely to develop. Published preclinical studies have demonstrated that ONCONASE® causes an increase in both tumor blood flow and in median tumor oxygen partial pressure, causing tumor cells to become less resistant to radiation therapy regardless of the presence or absence of the functional p53 tumor-suppressor gene. In pre-clinical research at the University of Pennsylvania, ONCONASE®, when combined with radiation therapy, enhanced the radiation-sensitivity to treatment in NSCLC tumor cells without causing the common radiation-induced tissue damage to non-tumor cells. ONCONASE® inhibited sub-lethal damage repair, or SLDR and potentially lethal damage repair, or PLDR in these animal models. We believe these findings further expand the profile of ONCONASE® in vivo activities and its potential clinical utility and market potential.

ONCONASE® As a Resistance-Overcoming and Apoptosis-Enhancing Agent

The Fas (CD95) cell surface receptor (and its Fas ligand FasL) has been recognized as an important "death" receptor involved in the induction of the "extrinsic" pathway of apoptosis. The apoptotic pathways have been the preferred target for new drug development in cancer, autoimmune, and other therapeutic areas.

The Thoracic Surgery Branch of the NCI confirmed the synergy between ranpirnase and soluble Fas ligand, or sFasL in inducing significant apoptosis in sFasL-resistant Fas+tumor cells. These results provided rationale for using ONCONASE® as a potential treatment of FasL-resistant tumors and possibly other disorders such as the autoimmune lympho-proliferative syndrome (ALPS).

Evaluation Of ONCONASE® As An Anti-Viral Agent

The ribonucleolytic activity was the basis for testing ONCONASE® as a potential anti-viral agent against HIV. The NIH has performed an independent in vitro screen of ONCONASE® against the HIV virus type 1. The results showed ONCONASE® to inhibit replication of HIV by up to 99.9% after a four-day incubation period at concentrations not toxic to uninfected cells. In vitro findings by the NIH revealed that ONCONASE® significantly inhibited production of HIV in several persistently infected human cell lines, preferentially breaking down viral RNA while not affecting normal cellular ribosomal RNA and messenger RNAs, which are essential to cell function.

Moreover, the NIAID also screened ONCONASE® for anti-HIV activity. ONCONASE® demonstrated highly significant anti-HIV activity in the monocyte/macrophage, or anti-viral, system. Ranpirnase may inhibit viral replication at several points during the life cycle of HIV, including its early phases. Ranpirnase may inhibit replication of all different HIV-1 subtypes. These properties of ranpirnase are particularly relevant in view of the extremely high and exponentially increasing rate of mutations of HIV that occur during infection, and which are primarily responsible for the development of resistance to several currently available anti-viral drugs. At present, over 50% of clinical isolates of HIV are resistant to both reverse transcriptase, mechanisms which combat viral replication, and protease inhibitors drugs, a class of anti-viral drugs. An additional 25%, while being sensitive to protease inhibitors, are resistant to reverse transcriptase inhibitor drugs.

COMMERCIAL RELATIONSHIPS

License Agreements

In January 2008, we entered into a U.S. License Agreement for ONCONASE® with Par Pharmaceutical, Inc. or Par. Under the terms of the License Agreement, Strativa Pharmaceuticals or “Strativa, the proprietary products division of Par, received exclusive marketing, sales and distribution rights to ONCONASE® for the treatment of cancer in the United States and its territories. We retained all rights and obligations for product manufacturing, clinical development and obtaining regulatory approvals, as well as all rights for those non-U.S. jurisdictions in which we have not currently granted any such rights or obligations to third parties. We received a cash payment of $5 million upon the signing of the License Agreement and were entitled to additional development and sales milestone payments and double-digit royalties on net sales of ONCONASE®.

On September 8, 2009, we entered into a Termination and Mutual Release Agreement or Termination Agreement with Par pursuant to which our License Agreement and Supply Agreement with Par were terminated. The License Agreement was terminated and all rights under the license granted to Par revert back to us under the Termination Agreement. Under the Supply Agreement, we had agreed to supply all of Par’s requirements for ONCONASE®. Pursuant to the Termination Agreement, Par will be entitled to a royalty of 2% of net sales of ONCONASE® or any other ranpirnase product developed by us for use in the treatment of cancer in the United States and its territories commencing with the first sale of such product and terminating upon the later to occur of the 12th anniversary of the first sale and the date of expiration of the last valid claim of a pending application or issued patent owned or controlled by us with respect to such product.

Marketing and Distribution Agreements

Megapharm Ltd.

In May 2008, we entered into an exclusive marketing, sales and distribution agreement with Megapharm Ltd. for the commercialization of ONCONASE® in Israel. Under the agreement, we are eligible to receive 50% of net sales in the territory. We will be responsible for the manufacture and supply of ONCONASE® to Megapharm, while Megapharm will be responsible for all activities and costs related to regulatory filings and commercial activities in the territory.

BL&H Co. Ltd.

In January 2008, we entered into a marketing and distribution agreement with BL&H Co. Ltd. for the commercialization of ONCONASE® in Korea, Taiwan and Hong Kong. Under the agreement, we received a $100,000 up-front fee and are eligible to receive additional cash milestones and 50% of net sales in the territory. We will be responsible for the manufacture and supply of ONCONASE® to BL&H, while BL&H will be responsible for all activities and costs related to regulatory filings and commercial activities in the territory.

US Pharmacia

In July 2007, we entered into a Distribution and Marketing Agreement or the Distribution Agreement, with USP Pharma Spolka Z.O.O. or the Distributor, an affiliate of US Pharmacia, pursuant to which the Distributor was granted exclusive rights for the marketing, sales, and distribution of ONCONASE® for use in oncology in Poland, Belarus, Ukraine, Estonia, Latvia, and Lithuania or the Territory for an initial term that ends upon the earlier of (i) 10 years from the first commercial sale in the Territory and (ii) the date all of the patents covering the product in the Territory expire. We received an up-front payment of $100,000 and will also be entitled to receive milestone payments based on the achievement of certain regulatory approvals and certain sales goals. In addition, we will receive a royalty on net sales as well as a transfer price for product sold by us to the Distributor. We will be responsible for making regulatory filings with and seeking marketing approval of ONCONASE® in the Territory and manufacturing and supplying ONCONASE® to the Distributor. The Distributor will be responsible for all commercial activities and related costs in the Territory.

In connection with the Distribution Agreement, we also entered into a Securities Purchase Agreement, with Unilab LP, an affiliate of US Pharmacia, pursuant to which we issued a total of 553,360 shares of restricted common stock for approximately $1.4 million, or $2.53 per share.

GENESIS Pharma S.A.

In December 2006, we entered into a Distribution and Marketing Agreement with GENESIS Pharma S.A. or GENESIS, pursuant to which GENESIS was granted exclusive rights for the marketing, sales, and distribution of ONCONASE® for use in oncology in Greece, Cyprus, Bulgaria, Romania, Slovenia, Croatia, Serbia, and the Former Yugoslavian Republic of Macedonia or the Region for an initial term that ends upon the earlier of (i) 10 years from the first commercial sale in the Region and (ii) the date all of the patents covering the product in the Region expire. We will retain ownership of all intellectual property relating to ONCONASE® and responsibility for all regulatory filings with EMEA in the European Union (EU), with GENESIS providing assistance with regard to regulatory filings in the non-EU countries included in this agreement. We will also be responsible for manufacturing and supplying the product to GENESIS, which will distribute the product. GENESIS will have lead responsibility for all ONCONASE® commercialization activities and will manage all operational aspects of the marketing, sales and distribution of the product in the Region. We are entitled to receive milestone payments based on the achievement of certain regulatory approvals and certain sales goals. In addition, we will receive a royalty on net sales as well as a transfer price for product sold by us to GENESIS.

Manufacturing

In January 2008, we entered into a Purchase and Supply Agreement or the Supply Agreement with Scientific Protein Laboratories LLC or SPL. Under the Supply Agreement, SPL will manufacture and be our exclusive supplier for the bulk drug substance used to make ONCONASE®. The term of the Supply Agreement shall be ten years and we have the right to terminate the Supply Agreement at any time without cause on two years prior notice to SPL.

Additionally, we contract with Ben Venue Laboratories Inc. or Ben Venue for vial filling and with Bilcare Global Clinical Supplies, Americas or Bilcare, Aptuit, Inc. or Aptuit and Catalent Pharma Solutions, Inc. or Catalent for the labeling, storage and shipping of ONCONASE® for use in clinical trials. Other than these arrangements we do not have specific arrangements for the manufacture of ONCONASE®.

Products manufactured for use in clinical trials and for commercial sale must be manufactured in compliance with Current Good Manufacturing Practices (CGMP). SPL, Ben Venue, Aptuit and Catalent are all licensed or approved by the appropriate regulatory agencies and all work is performed in accordance with CGMP. For the foreseeable future, we intend to rely on these manufacturers and related service providers, or substitute vendors, if necessary, to manufacture our product. We believe, however, that there are substantial alternative providers for the services for which we contract. For those relationships where we have not entered into formal agreements, we utilize the services of these third party contractors solely on an as needed basis with prices and terms customary for companies in businesses that are similarly situated. In order to replace an existing manufacturer, we must amend our Investigational New Drug application to notify the appropriate regulatory agencies of the change. We are dependent upon our contract manufacturers to comply with CGMP and to meet our production requirements. It is possible that our contract manufacturers may not comply with CGMP or deliver sufficient quantities of our products on schedule, or that we may be unable to find suitable and cost effective alternative providers if necessary.

Raw Materials

The major active ingredient derived from leopard frog eggs is the protein ranpirnase. We believe we have sufficient egg inventory on hand to produce enough ONCONASE® for our future clinical trials and early commercialization. In

addition, we have successfully produced ranpirnase in small proof-of-concept size batches using recombinant technology. However, this technology requires additional testing and FDA approval and it may be determined to not be more cost effective than current methods of production.

PATENTS AND PROPRIETARY TECHNOLOGY

We have sought to protect our technology by applying for, and obtaining, patents and trademark registrations. We have also relied on trade secrets and know-how to protect our proprietary technology. We continue to develop our portfolio of patents, trade secrets, and know how. We have obtained, and continue to apply for, patents concerning our RNase-based technology.

In addition, we have filed (and we intend to continue to file) foreign counterparts to certain U.S. patent applications. Generally, we apply for patent protection in the United States, Europe, Japan, and certain other foreign countries.

We own the following U.S. patents:

Patent No.	Issue Date	Subject Matter	Expiration **
5,529,775	June 1996	covers combinations of ONCONASE® with certain other pharmaceuticals	June 2013
5,728,805	Mar. 1998	covers a family of variants of ONCONASE®	June 2013
5,540,925	July 1996	covers combinations of ONCONASE® with certain other pharmaceuticals	July 2013
5,559,212	Sept. 1996	covers the amino acid sequence of ONCONASE®	Sept. 2013
5,595,734	Jan. 1997	covers combinations of ONCONASE® with certain other pharmaceuticals	Jan. 2014
6,649,392 B1*	Nov. 2003	covers a family of recombinant variants of ONCONASE®	Apr. 2016
6,649,393 B1*	Nov. 2003	covers nucleic acids encoding recombinant variants of ONCONASE® and methodology for producing such variants	Apr. 2016
6,290,951 B1	Sept. 2001	covers alteration of the cell cycle in vivo, particularly for inducing apoptosis of tumor cells	Aug. 2018
6,239,257 B1	May 2001	covers a family of variants of ONCONASE®	Dec. 2018
6,175,003 B1	Jan. 2001	covers the genes of ONCONASE® and a variant of ONCONASE®	Sept. 2019
6,423,515 B1	July 2002	covers methodology for synthesizing gene sequences of ranpirnase and a genetically engineered variant of ranpirnase	Sept. 2019
7,229,824 B1***	June 2007	covers a vector containing DNA encoding a genetically engineered variant of ONCONASE®	May 2024
7,556,952 B2	July 2009	covers a gene encoding a genetically engineered variant of ONCONASE®	July 2023
7,556,951 B2	July 2009	covers a gene encoding a genetically engineered variant of ONCONASE®, and a vector containing DNA encoding a genetically engineered variant of ONCONASE®	July 2023
7,556,953 B2	July 2009	covers a gene encoding a genetically engineered variant of ONCONASE®, and a vector containing DNA encoding a genetically	July 2023

		engineered variant of ONCONASE®	
7,442,535 B2	October 2008	covers a fusion protein containing a genetically engineered variant of ONCONASE®	July 2023
7,585,655 B2	September 2009	covers a gene encoding a genetically engineered variant of ONCONASE®, and a vector containing DNA encoding such variant	July 2023
7,442,536 B2	October 2008	covers genetically engineered variants of ONCONASE®	July 2023
7,585,654 B2	September 2009	covers a vector containing DNA encoding a genetically engineered variant of ONCONASE®, and a gene encoding a genetically engineered variant of ONCONASE®	July 2023
7,473,542 B2	January 2009	Covers a fusion protein containing a genetically engineered variant of ONCONASE®	July 2023

*We own this patent jointly with the U.S. Government. We do not pay maintenance fees to keep this patent in force.

We own the following foreign patents in Europe (European patents are validated in selected European nations), Japan and Singapore:

Patent No.	Subject Matter	Expiration **
EP 0 500 589 JP 2972334	cover combinations of ONCONASE® with certain other pharmaceuticals	Oct. 2010
EP 0 656 783 JP 3655628	covers combinations of ONCONASE® with certain other pharmaceuticals	July 2013
EP 0 837 878 JP 3779999	covers a variant of ONCONASE®	June 2016
EP 1 141 004	covers a family of variants of ONCONASE®	December 2019
SG 118886	covers variants of ONCONASE® and methods of making them	May 2024

**Assumes timely payment of all applicable maintenance fees and annuities; excludes term extensions that do or may apply.

***Includes a term extension of 312 days under 35 U.S.C. §154(b).

We also have patent applications pending in the United States, Europe, Japan, and other foreign countries.

The scope of protection afforded by patents for biotechnological inventions can be uncertain, and such uncertainty may apply to our patents as well. The patent applications we have filed, or that we may file in the future, may not result in patents. Our patents may not give us a competitive advantage, may be wholly or partially invalidated or held unenforceable, or may be held not to have been infringed by products that compete with our products. Patents owned by others may adversely affect our ability to do business. Furthermore, others may independently develop products that are similar to our products or that duplicate our products, and may design around the claims of our patents. Although we believe that our patents and patent applications are of substantial value to us, we cannot assure you that such patents and patent applications will be of commercial benefit to us, will adequately protect us from competing products or will not be challenged, declared invalid, or found not to have been infringed by competing products. We also rely on proprietary know-how and on trade secrets to develop and maintain our competitive position. Others may independently develop or obtain access to such know-how or trade secrets. Although our employees and consultants having access to proprietary information are required to sign agreements that require them to keep such information confidential, our employees or consultants may breach these agreements or these agreements may be held to be unenforceable.

GOVERNMENT REGULATION

The manufacturing and marketing of pharmaceutical products in the United States require the approval of the FDA under the Federal Food, Drug and Cosmetic Act. Similar approvals by comparable regulatory agencies are required in most foreign countries. The FDA has established mandatory procedures and safety standards that apply to the clinical testing, manufacturing and marketing of pharmaceutical products in the United States. Obtaining FDA approval for a new therapeutic may take many years and involve substantial expenditures. State, local and other authorities also regulate pharmaceutical manufacturing facilities.

As the initial step in the FDA regulatory approval process, preclinical studies are conducted in laboratory dishes and animal models to assess the drug's efficacy and to identify potential safety problems. Moreover manufacturing processes and controls for the product are required. The manufacturing information along with the results of these studies is submitted to the FDA as a part of the Investigational New Drug Application, or IND, which is filed to obtain approval to begin human clinical testing. The human clinical testing program typically involves up to three phases. Data from human trials as well as other regulatory requirements such as chemistry, manufacturing and controls, pharmacology and toxicology sections, are submitted to the FDA in an NDA or Biologics License Application, or BLA. Preparing an NDA or BLA involves considerable data collection, verification and analysis. A similar process in accordance with EMEA regulations in Europe and with TGA regulations in Australia is required to gain marketing approval. Moreover, a commercial entity must be established and approved by the EMEA in a member state of the EU at least three months prior to filing the Marketing Authorization Application, or MAA.

We have not received United States or other marketing approval for any of our product candidates and may not receive any approvals. We may encounter difficulties or unanticipated costs in our effort to secure necessary governmental approvals, which could delay or preclude us from marketing our products.

With respect to patented products, delays imposed by the governmental approval process may materially reduce the period during which we may have the exclusive right to exploit them.

ENVIRONMENTAL MATTERS

Our operations are subject to comprehensive regulation with respect to environmental, safety and similar matters by the United States Environmental Protection Agency and similar state and local agencies. Failure to comply with applicable laws, regulations and permits can result in injunctive actions, damages and civil and criminal penalties. If we expand or change our existing operations or propose any new operations, we may need to obtain additional or amend existing permits or authorizations. We spend time, effort and funds in operating our facilities to ensure compliance with environmental and other regulatory requirements.

Such efforts and expenditures are common throughout the biotechnology industry and generally should have no material adverse effect on our financial condition. The principal environmental regulatory requirements and matters known to us requiring or potentially requiring capital expenditures by us do not appear likely, individually or in the aggregate, to have a material adverse effect on our financial condition. We believe that we are in compliance with all current laws and regulations.

EMPLOYEES

As of April 20, 2010, we had four full time employees of whom two were engaged in clinical and pre-clinical research and development activities and two were engaged in administration and management. All of our employees have entered into confidentiality agreements with us. We consider relations with our employees to be good. None of our employees are covered by a collective bargaining agreement.

DESCRIPTION OF PROPERTY

In March 2007, we entered into a lease for 15,410 square feet in an industrial office building located in Somerset, New Jersey to replace our facility in Bloomfield, NJ as our principal office. The lease term commenced on July 3, 2007 and is scheduled to terminate on November 30, 2017. The average monthly rental obligation over the full term of the lease is approximately $25,000. Currently, we are in default of our lease agreement for non payment of rent and failure to maintain security deposit, although Landlord has been drawing funds from our secured irrevocable letter of credit. In January 2010, the Company vacated the facility pursuant to the mutual agreement between the Company and

the landlord. The landlord is currently seeking unspecified damage for an alledged breach of the lease agreement. For further details, please see “Legal Proceedings” below.

LEGAL PROCEEDINGS

On October 9, 2009, Robert Love, a former Chief Financial Officer and alleged shareholder of the Company, filed a complaint, Love v. Alfacell Corp. et al., Case No. 3:09-cv-05199-MLC-LHG, against the Company and certain of its current and former directors in the United States District Court, District of New Jersey, asserting violations of federal and state securities laws, direct and derivative common law claims for fraud and breach of fiduciary duty, and a direct claim for negligent misrepresentation in connection with the Company’s Phase IIIb clinical trial for ONCONASE®. The complaint alleges that the Company misled shareholders by issuing allegedly false projections of when the required number of patients deaths would occur in the Phase IIIb trial. The Complaint seeks compensatory damages of no less than $350,000, punitive damages of no less than $20 million, and an accounting and constructive trust. The Company believes that the claims are meritless and intends to defend the case vigorously.

Premier Research Group filed and served a lawsuit against the Company in the Superior Court of New Jersey, Law Division, Essex County, on or about July 26, 2009, seeking the recovery of professional fees that arose from clinical trials purportedly performed in Europe by Premier Research Group as assignee of a contract between the Company and IMFORM GmbH dated October 27, 2005. An Answer with Separate Defenses and Counterclaim was filed on or about July 30, 2009. This case remains in the early stages of discovery.

I & G Garden State, LLC filed and served a complaint against the Company in the Superior Court of New Jersey Law Division, Special Civil Part Landlord-Tenant Section, Somerset County, on or about October 30, 2009, for non-payment of rent and failure to maintain security deposit. The complaint seeks to have us vacate the property. On November 13, 2009, the Company and I & G mutually agreed that the Company will vacate the property on or before December 31, 2009. In January 2010, the Company vacated the facility pursuant to the mutual agreement. In February 2010, I & G withdrew the remaining balance of the Company's secured irrevocable letter of credit which was placed in March 2007 in the amount of approximately $81,000. On February 5, 2010, I & G commenced an action against the Company. The lawsuit seeks unspecified damage for an alleged breach of the lease agreement entered into in March 2007 between the Company and I & G. The Company intends to vigorously defend this action.

COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our common stock has been quoted on the Pink Sheets since our delisting from the Nasdaq Capital Market, or Nasdaq, on January 6, 2009 for failure to comply with the $35 million minimum market value requirement under Marketplace Rule 4310(c)(3)(B) or the $1 per share minimum bid price requirement under Marketplace Rule 4310(c)(4). In addition, we also did not meet the $2.5 million minimum stockholders' equity requirement under Marketplace Rule 4310(c)(3)(A) or the requirement for a minimum net income from continuing operations of $500,000 in the most recently completed fiscal year or in two of the last three most recently completed fiscal years under Marketplace Rule 4310(c)(3)(C). Our common stock remains thinly traded at times and you may be unable to sell our common stock during times when the trading market is limited. As of November 10, 2009, there were approximately 975 stockholders of record of our common stock.

Prior to January 6, 2009, our common stock was listed on Nasdaq and had traded under the symbol "ACEL" since September 9, 2004. Before September 9, 2004, our common stock was traded on the OTC Bulletin Board (OTCBB).

The following table sets forth the range of high and low sale prices of our common stock for the two fiscal years ended July 31, 2009 and 2008. The prices were obtained from Pink Sheets and Nasdaq, and are believed to be representative of inter-dealer prices, without retail mark-up, mark-down or commission, and may not necessarily represent actual transactions.

	High	Low
Year Ending July 31, 2010:		
First Quarter	$ 0.32	$ 0.21
Second Quarter	0.30	0.14
Third Quarter	0.35	0.13
Year Ended July 31, 2009:		
First Quarter	0.85	0.40
Second Quarter	0.54	0.08
Third Quarter	0.20	0.06
Fourth Quarter	0.52	0.11

Year Ended July 31, 2008:

First Quarter	2.70	1.75
Second Quarter	2.69	1.45
Third Quarter	2.60	1.70
Fourth Quarter	2.20	0.35

STOCKHOLDER RETURN PERFORMANCE GRAPH

The following graph summarizes the total cumulative return experienced by our stockholders during the five-year period ended July 31, 2009, compared to the Nasdaq Composite Index and the Nasdaq Pharmaceutical Index. The changes for the periods shown in the graph and table are based on the assumption that $100.00 was invested in our common stock and in each index below on July 31, 2004 and that all cash dividends were reinvested. The table does not forecast performance of our common stock.

DIVIDENDS

We have not paid dividends on our common stock since inception, and we do not plan to pay dividends in the foreseeable future. Any earnings we may realize will be retained to finance our growth. Additionally, pursuant to the terms of senior secured notes issued in connection with our October 2009 private financing, we are not permitted to declare or pay any cash dividends or distributions on its outstanding capital stock for so long as the notes are outstanding.

MANAGEMENT

DIRECTORS AND OFFICERS

Name	Age	Director/Officer Since	Current Position With Company
Charles Muniz(1)	55	2009	President, CEO, CFO and Director
David Sidransky, M.D	49	2004	Chairman of the Board
John P. Brancaccio	62	2004	Director
Paul M. Weiss, Ph.D.	52	2003	Director

(1) Mr. Muniz was elected as our Company's President, Chief Operating Officer, CFO and director on April 3, 2009 and entered into an employment agreement with the Company to serve as our President, CEO and CFO on October 19, 2009. Mr. Muniz will hold office until his successor is elected and qualified or until his earlier resignation or removal, death or resignation.

Business Experience of Directors and Executive Officers

The Company's directors and executive officers have provided the following information about their principal occupation, business experience and other matters.

Charles Muniz joined us on April 3, 2009 as our President, COO, CFO and a member of our Board of Directors and entered into an employment agreement with the Company to serve as our President, CEO and CFO on October 19, 2009. From 2007 until he joined our company, Mr. Muniz was a consultant to a wide variety of clients focusing primarily on the strategic use of operations and technology. Prior to consulting, he was President and Chief Executive Officer of Digital Creations Corp., a company he founded which sold high-end systems, work stations, peripherals, networking and software products, from 1989 to 2007. Mr. Muniz attended Pace University in New York and majored in Business Administration. Mr. Muniz's extensive entrepreneurial and executive experience and his in-depth knowledge of our company in his executive capacity enable him to make critical contributions as a member of our Board.

David Sidransky, M.D., joined the Board in May 2004, was elected Chairman of the Board in January 2008 and is the Chairman of our Scientific Advisory Board. Dr. Sidransky is a founder of several private biotechnology companies and has served on scientific advisory boards of numerous private and public companies, including Medimmune, Telik, Roche and Amgen. He was formerly on the board of scientific counselors at the NIDCR and a member of the Recombinant DNA advisory committee at the National Institute of Health NIH (RAC). He served on the board of directors of ImClone Systems, Zila Inc, and Xenomics and is now chairman of the board of Champions Biotechnology Inc. Dr. Sidransky is on numerous editorial boards and has served as senior editor of several cancer related journals. Currently, Dr. Sidransky is the director of the Head and Neck Cancer Research Division at Johns Hopkins University School of Medicine. In addition, he is Professor of Oncology, Otolaryngology-Head and Neck Surgery, Cellular & Molecular Medicine, Urology, Genetics, and Pathology at John Hopkins University and Hospital. Dr. Sidransky is certified in Internal Medicine and Medical Oncology by the American Board of Medicine. He has over 400 peer-reviewed publications, has contributed more than 60 cancer reviews and chapters, and also has numerous issued biotechnology patents. He has been the recipient of many awards and honors, including the 1997 Sarstedt International Prize from the German Society of Clinical Chemistry, the 1998 Alton Ochsner Award Relating Smoking

and Health by the American College of Chest Physicians and the 2004 Hinda Rosenthal Award by the American Association of Cancer Research. Dr. Sidransky received his B.A. from Brandeis University and his M.D. from the Baylor College of Medicine. Dr. Sidransky's extensive knowledge of, and experience in, scientific research, our business strategy, industry and R&D programs, experience as a founder of several biotechnology companies and long-term medical background make him uniquely qualified to serve on our board.

John P. Brancaccio joined the Board in January 2004. Since April 2004, Mr. Brancaccio has been the chief financial officer of Accelerated Technologies, Inc., an incubator for venture backed medical device companies. He also serves on the boards of Callisto Pharmaceuticals, Inc., Synergy Pharmaceuticals, Inc. and Xenomics, Inc., all of which are publicly traded biopharmaceutical companies where he is chairman of their respective audit committees and a member of their respective compensation and nominating committees. He was the secretary and treasurer of Memory Pharmaceuticals Corporation from December 2003 to March 2004 after serving in the capacity of their acting chief financial officer from May 2002 to December 2003. Prior to Memory Pharmaceuticals, Mr. Brancaccio held the positions of chief financial officer and chief operating officer of Eline Group, a publicly traded entertainment and media company, where he oversaw the roll up of several related companies into the group and completed private equity financing placements. Prior to joining Eline Group, he held a number of senior executive positions in public and private companies including Atlantic Pharmaceuticals, Zambon Corporation, Deven International and Health Learning Systems. During his tenure with these companies he participated in initial public offerings and negotiation of licensing and development agreements within both the pharmaceutical and biotechnology industries. He is a retired Certified Public Accountant and a graduate of Seton Hall University.

Paul Weiss, Ph.D., joined the Board in February 2003. Since October 2007, Dr. Weiss has been a Managing Director at Venture Investors, LLC, a Madison, Wisconsin-based venture capital group focusing on early-stage life sciences companies. Prior to joining Venture Investors, LLC, Dr. Weiss was President of the Gala Biotech business unit of Cardinal Health (now Catalent Pharma Solutions) from February 2002 until October 2007. He had served as a director on Gala's Board from 1998 to 2001, when he joined the management team as Senior Vice President of Business Development. He later became President of Gala and remained so during the acquisition of Gala by Cardinal Health in 2003 and then the acquisition of Gala (and other Cardinal Health businesses) by The Blackstone Group in 2007. Prior to joining Gala, Dr. Weiss was Vice President of Technology and Product Licensing at 3-Dimensional Pharmaceuticals (3DP) from 1998 to 2001, which went public in 2001 and was later acquired by Johnson & Johnson. Prior to joining 3DP, Dr. Weiss was director of Licensing for Wyeth Pharmaceuticals. Dr. Weiss holds a Ph.D. in Biochemistry and an MBA from the University of Wisconsin-Madison and a B.Sc. in Biochemistry from the Carleton University Institute of Biochemistry in Ottawa, Ontario. Dr. Weiss in-depth knowledge of our business strategy and our industry and his extensive executive experience make him qualified to serve on our board.

The Company closed on a private placement of convertible promissory notes and warrants in which the Company received $3,250,000 in gross proceeds on October 19, 2009. As a condition to such financing, each member of the Board, other than Dr. Sidransky, Chairman of the Board and Mr. Muniz, agreed to resign from the Board upon the request of Dr. Sidransky made at any time following October 19, 2009 and December 31, 2009.

CORPORATE GOVERNANCE

Family Relationships

There are no family relationships among any of the Company's directors or executive officers.

Board Meetings

The Board met fourteen times during the 2009 fiscal year. Each of our current directors attended at least 75% of the meetings of the Board and committees on which he served.

Independent Directors

The Board has determined that the following directors are “independent” under Nasdaq Marketplace Rule 4200(a)(15): John P. Brancaccio, David Sidransky, M.D. and Paul M. Weiss, Ph.D. The Board has also determined that each of John Brancaccio and Paul M. Weiss, Ph.D (who are members of the Audit Committee) is “independent” in accordance with Section 10A(m)(3) of the Securities Exchange Act of 1934.

Board Leadership Structure and Risk Oversight

Dr. Sidransky serves as the Chairman of the Board. Dr. Sidransky has extensive knowledge of, and experience in, scientific research and our industry. He also has strong leadership skills as he has been founder of several biotechnology companies and has long-term medical background. Dr. Sidransky has been with the Company since 2004 and is familiar with our business strategy and industry. The Board also believes that independent oversight of management is an important component of an effective board of directors. Therefore, the Board believes that the most effective Board leadership structure for our company at the present time is for Dr. Sidransky to lead the Board as the Chairman. The Board retains its authority to modify this structure to best address the Company's unique circumstances, and to advance the best interest of stockholders, as and when appropriate.

Our audit committee is responsible for overseeing our risk management function. While the audit committee has primary responsibility for overseeing risk management, our entire Board of Directors is actively involved in overseeing our risk management. For example, the Board of Directors engages in periodic discussions with such company officers as the Board of Directors deems necessary, including our CEO, CFO and COO. We believe that the leadership structure of our Board of Directors supports effective risk management oversight.

Board Committee Membership

The Board has standing Compensation, Corporate Governance and Nominating, Audit, Research and Clinical Oversight, and Commercial and Business Development Oversight Committees. The current membership of the standing committees is set forth in the following table:

Name	Compensation Committee	Corporate Governance and Nominating Committee	Audit Committee	Research and Clinical Oversight Committee	Commercial and Business Development Oversight Committee
Charles Muniz					
John P. Brancaccio	**		**		
David Sidransky, M.D.		**		**	*
Paul M. Weiss, Ph.D.	*	*	*	*	**

* Member
** Chair

Compensation Committee. All of the members of our Compensation Committee are considered "independent directors" in accordance with Nasdaq Marketplace Rule 4200(a)(15). In fiscal year 2009, the Compensation Committee met twice.

On June 28, 2004, the Board adopted a Compensation Committee Charter, a copy of which is maintained on our website at www.alfacell.com. According to its charter, the Compensation Committee shall consist of at least three members, each of whom shall be a non-employee director who has been determined by the Board to meet the independence requirements of the Nasdaq Stock Market. Given the reduction in the size of the Board, the Compensation Committee currently has only two members.

The Compensation Committee Charter describes the primary functions of the Compensation Committee as follows:

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Review and approve executive compensation on an annual basis, including the corporate goals and objectives to be used in evaluating the performance of the CEO and determining the CEO's compensation;

- Review trends in management compensation, oversee the development of new compensation plans and, when necessary, approve the revision of existing plans;
- Oversee management's decisions concerning compensation and performance for non-executive officers;
- Review our incentive compensation and other stock-based plans and recommend change to such plans to the Board as needed;
- Administer stock plans and benefit programs and approve any amendments to existing plans;
- Recommend director compensation;
- Evaluate compliance with our compensation plans and policies; and
- Review the compensation policy for all of our employees.

Corporate Governance and Nominating Committee. All of the members of our Corporate Governance and Nominating Committee are considered "independent directors" in accordance with Nasdaq Marketplace Rule 4200(a)(15). In fiscal year 2009, the Corporate Governance and Nominating Committee did not meet.

The Corporate Governance and Nominating Committee was formed by the Board for the purpose of considering future nominees to the Board. On November 28, 2007, the Board adopted a Corporate Governance and Nominating Committee Charter, a copy of which is maintained on our website at www.alfacell.com. According to its charter, the Corporate Governance and Nominating Committee shall be comprised of at least three directors, each of whom shall meet the independence requirements of the Nasdaq Stock Market. Given the reduction in the size of the Board, the Corporate Governance and Nominating Committee currently has only two members.

The Corporate Governance and Nominating Committee Charter describes the primary functions of the Corporate Governance and Nominating Committee as follows:

- Identify and evaluate individuals qualified to serve as members of the Board (including individuals nominated by stockholders in proposals made in writing to the Company's Secretary that are timely received and that contain sufficient background information concerning the nominee to enable proper judgment to be made as to the nominee's qualifications);
- Recommend for the Board's selection nominees for election as directors of the Company at the next annual or special meeting of stockholders at which directors are to be elected or to fill any vacancies then existing on the Board;
- Cause to be prepared and recommend to the Board the adoption of corporate governance guidelines and from time to time, review and assess the guidelines and recommend changes for approval by the Board;
- From time to time, review and assess the Code of Business Conduct and Ethics and recommend changes for approval by the Board;
- Make recommendations to the Board regarding issues of management succession; and
- Conduct annual reviews and assessments of the adequacy of the Corporate Governance and Nominating Committee Charter and recommend any proposed changes to the Board for approval.

Audit Committee. All of the members of our Audit Committee are considered "independent directors" in accordance with Nasdaq Marketplace Rule 4200(a)(15) and Section 10A(m)(3) of the Securities Exchange Act. Our Board has determined that Mr. Brancaccio qualifies as an "audit committee financial expert" as defined by Item 407 of Regulation S-K. In fiscal year 2009, the Audit Committee met five times.

On November 25, 2008, the Board adopted the Amended and Restated Audit Committee Charter, a copy of which is maintained on our website at www.alfacell.com. According to its charter, the Audit Committee shall be comprised of at least three directors, each of whom shall meet the independence requirements of the Nasdaq Stock Market and Section 10A(m)(3) of the Exchange Act, and each of whom shall not have participated in the preparation of the financial statements of the Company at any time during the past three years. The Audit Committee's purpose, duties and responsibilities under its charter include those specified in the listing standards of the Nasdaq Stock Exchange for audit committees. Given the reduction in the size of the Board, the Audit Committee currently has only two members.

The Audit Committee Charter describes the primary functions of the Audit Committee as follows:

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Appoint, evaluate and, as the Committee may deem appropriate, terminate and replace our independent registered public accounting firm;

- Monitor the independence of our independent registered public accounting firm;
- Determine the compensation to be paid to our independent registered public accounting firm;
- Review with management and our independent registered public accounting firm the effect of regulatory and accounting initiatives as well as off-balance sheet structures on the Company's financial statements;
- Review the experience and qualifications of the Company's senior finance executives as well as senior members of the independent registered public accounting firm team and the quality control procedures thereof;
- Pre-approve all audit services and permitted non-audit services to be performed by our independent registered public accounting firm and establish policies and procedures for the engagement of our independent registered public accounting firm to provide permitted non-audit services;

- Conduct annual reviews and assessments of the adequacy of the Audit Committee Charter and the continued independence of the independent registered public accounting firm and recommend any proposed changes to the Board for approval;
- Advise the Board with respect to the Company's policies and procedures regarding compliance with applicable laws and regulations and with the Company's Code of Business Conduct and Ethics;
- Review all related-party transactions for potential conflict of interest situations and approve such related-party transactions;
- Establish procedures for the confidential and anonymous receipt, retention and treatment of complaints regarding the Company's accounting, internal controls and auditing matters; and
- Report to the Board on all of the foregoing matters.

Research and Clinical Oversight Committee. The Research and Clinical Oversight Committee, or Research Committee, was established in February 2007 and is chaired by David Sidransky, M.D. All of the members of our Research Committee are considered "independent directors" in accordance with Nasdaq Marketplace Rule 4200(a)(15).

The primary function of the Research Committee is to work closely with management and the Scientific Advisory Board to provide support and direction to the Company's research and development programs. The Research Committee functions as an advisory committee and does not hold formal committee meetings or take formal committee actions.

Commercial and Business Development Oversight Committee. The Commercial and Business Development Oversight Committee, or the Development Committee, was established in February 2007 and is chaired by Paul Weiss, Ph.D. All of the members of our Development Committee are considered "independent directors" in accordance with Nasdaq Marketplace Rule 4200(a)(15).

The primary function of the Development Committee is to assist management in pursuing commercial and business development opportunities for the products currently in development. The Development Committee functions as an advisory committee and does not hold formal committee meetings or take formal committee actions.

Code of Ethics

We have adopted a written Code of Business Conduct and Ethics, or Code of Ethics, that applies to the Company's principal executive officer, principal financial officer, principal accounting officer, and controller and to all its other employees. These standards are a guide to help ensure that all our employees live up to our high ethical standards. A copy of the Code of Ethics is maintained on our website at www.alfacell.com.

We intend to post on our website, any amendment to or waiver from any provision in our Code of Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, and that relates to any element of the standards enumerated in the rules of the SEC.

EXECUTIVE COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS

Compensation Philosophy

Our compensation program is based on the philosophy that the interests of our employees should be closely aligned with those of our stockholders. The Company's compensation program is based on the following principles:

- Compensation opportunities should attract the best talent, motivate individuals to perform at their highest levels, reward outstanding achievement and retain the leadership and skills necessary for building long-term stockholder value;
- Compensation should include a bonus potential which is tied directly to operating objectives; and
- Compensation should include a long-term incentive award generally in the form of stock option grants to increase ownership in the Company and encourage executives to manage from the perspective of owners of the Company.

The Compensation Committee believes that the compensation program for executive officers should reward the achievement of the short-term and long-term objectives of the Company, and that compensation should be related to the value created for its stockholders. However, given the highly volatile nature of biotechnology company stocks it would be impracticable for the Company to tie executive compensation solely to stock performance. In making its compensation decisions, the Compensation Committee generally reviews the progress made by the individual officer in attaining his or her individual performance goals and the progress made by the Company in its drug development programs, while keeping the Company's stock performance in mind. Generally, performance tied to the long-term objectives of the Company or the overall business objectives of the Company are rewarded with equity compensation, whereas performance tied to short-term goals of the Company or individual performance. As different elements of the Company's compensation have different underlying rationale and policy, determinations the Compensation Committee made with regard to one compensation element have not influenced decisions it made with respect to other compensation elements it contemplated or awarded. For example, the factor that our CEO may receive a bonus if the performance objectives are satisfied and may receive additional value through his stock options if the Company's stock performs well has not influenced the determination as to the base salary of our CEO.

The Company's compensation philosophy was last reviewed by the Board in May 2007, at which time two new compensation programs were approved by the Board, the Incentive Bonus Program and the Annual Milestones bonus program. These two bonus programs were approved by the Board because they each met the Company's desire to reward and encourage executive officers and employees for not only causing the Company to meet its primary objectives but also to meet certain short-term objectives within a timeline prescribed by management. See "Incentive Compensation" below for details relating to these two programs.

Role of the Compensation Committee

The Compensation Committee in our fiscal year 2009 consisted of Messrs. John P. Brancaccio, Chairman, Donald R. Conklin (resigned subsequently), and Paul M. Weiss Ph.D. All committee members had been and were non-employee directors as defined under Rule 16b-3 of the Exchange Act and satisfy the director independence standards of the Nasdaq Stock Market and the definition of "outside director" under Section 162(m) of the Internal Revenue Code. No special expertise in compensation matters is required for appointment to the Compensation Committee.

The Compensation Committee is responsible for all components of the Company's executive compensation program and for administering all stock option plans including the 2004 Stock Incentive Plan, under which stock option grants may be made to executive officers. On an annual basis, the Compensation Committee reviews and approves the corporate goals and objectives relevant to the compensation for the CEO and other executive officers, if any. The Compensation Committee evaluates at least once a year, the CEO and executive officers' performance in light of these established goals and objectives and based upon these evaluations will set the CEO's and executive officers' annual compensation, including salary, bonus, incentive and equity compensation.

Role of Consultants and Market Review

The Compensation Committee possesses the authority under its charter to hire advisors to provide it with information as needed in making compensation decisions. The Compensation Committee did not use a compensation consultant for fiscal year 2009.

Role of Management

While the Compensation Committee determines overall compensation philosophy, it relies on the CEO and other executive officers, if any, to make recommendations in accordance with such compensation philosophy. The Company's CEO and CFO, if any, provide the Board and the Compensation Committee with feedback on the performance of the Company's non-executive officers and make compensation recommendations to the Compensation Committee for its approval. In 2009, the CEO attended the Compensation Committee's meetings to provide the CEO's perspectives on competition in the industry and the needs of the business, information regarding the Company's performance and other advice specific to the CEO's areas of expertise. However, the CEO did not attend meetings where the CEO's compensation and/or performance was discussed. Once a recommendation has been approved by the Compensation Committee, it is sent to the Board for ratification. Upon ratification by the Board, the execution and administration of the recommendation may be delegated by the Compensation Committee to management as the Compensation Committee deems appropriate.

On April 3, 2009, Mr. Muniz joined our company and acted as our President, COO and CFO. With the retirement of Kuslima Shogen as our CEO in March 2009 and the departure of our former CFO, Lawrence Kenyon, in December 2008, Mr. Muniz has been our only executive officer since he joined the Company. At the time he joined the Company, the Compensation Committee agreed to pay him a consulting fee of $3,500 per week plus cost of travel between his home state of Florida and New Jersey. On October 19, 2009, the Company entered into an Employment Agreement with Mr. Muniz to serve as the Company's President, CEO and CFO. Under his Employment Agreement, Mr. Muniz will receive an annual base salary of $300,000 and is entitled to receive cash incentive compensation or annual stock option awards as determined by the Board or the Compensation Committee of the Board from time to time. In addition, Mr. Muniz is entitled to participate in any and all employee benefit plans established and maintained by the Company for executive officers of the Company. Pursuant to the Employment Agreement, Mr. Muniz received an Option granted under and in accordance with the Company's 2004 Stock Incentive Plan, to purchase an aggregate of 500,000 shares of common stock exercisable for ten years from the date the Option is granted. The Option shall vest in equal amounts on each of the first, second and third year anniversary of the grant so long as Mr. Muniz remains employed by the Company. The exercise price of the Option equals the fair market value of the common stock on the date of grant.

The Employment Agreement continues in effect for two years following the date of the agreement and automatically renews for successive one-year periods, unless Mr. Muniz's employment is terminated by him or by the Company. In the event that Mr. Muniz's employment is terminated by the Company for any reason, then Mr. Muniz is entitled to receive his earned but unpaid base salary and incentive compensation, unpaid expense reimbursements, accrued but unused vacation and any vested benefits under any employee benefit plan of the Company. In the event that Mr. Muniz's employment is terminated by the Company without "Cause" or by Mr. Muniz for "Good Reason" (as such terms are defined in the Employment Agreement), and provided Mr. Muniz executes a release in favor of the Company, then in addition to the above mentioned payments and benefits, Mr. Muniz is entitled to receive an amount equal to his then current annual base salary, payable in equal installments over 12 months in accordance with the Company's payroll practice, and all medical and health benefits for 18 months following the termination date. In addition, in the event Mr. Muniz's employment is terminated without Cause or for Good Reason within 12 months following a Change in Control (as defined in the Employment Agreement), and provided Mr. Muniz executes a release in favor of the Company, in lieu of the severance described above, Mr. Muniz is entitled to receive a lump cash payment equal to his then current annual base salary, all medical and health benefits for 18 months following the termination date and full acceleration of vesting of all unvested stock options and other stock-based awards. Mr. Muniz's Employment Agreement requires him to refrain from competing with the Company and from hiring our employees and soliciting our customers for a period of one year following the termination of his employment with the Company for any reason.

Executive Compensation Components

Compensation for the Company's executive officers includes the following components:

Base Salary. Fixed annual compensation that is certain as to payment and provides continuous income to meet ongoing living costs. This component is intended to ensure that we are able to retain executives capable of achieving the Company's strategic and business objectives. The Compensation Committee reviews executive officers' salaries annually and will make adjustments based on its expectations of that officer's performance as compared to the officer's actual performance and what the Compensation Committee's expectations are for that officer's future performance. Additionally, the Compensation Committee factors in cost of living adjustments as well as the Company's overall performance and stock performance. In 2008, the Compensation Committee also utilized a study of market compensation levels prepared by an independent compensation consultant in order to evaluate the executive's compensation, including base salaries. Such a study was used by the Compensation Committee in setting base salaries for the Company's fiscal year 2008. Such a study was not used in previous years and was not used in fiscal year 2009.

In the fiscal year 2009, in light on the Company's financial difficulties, lack of executive leadership and inability to conduct a thorough market-based analysis of executive compensation, the Compensation Committee determined that Mr. Muniz, the Company's sole executive officer, should receive the same base compensation package, in all material respects, as his predecessor, Kuslima Shogen.

Stock Option Grants. Long-term incentive plan which offers eligible Company officers and employees incentives to put forth maximum efforts for the success of the Company's business, to afford executive officers an opportunity to acquire a proprietary interest in the Company and to relate the compensation of officers to the value they create for the Company's stockholders. Currently, all stock-based awards are granted under the 2004 Stock Incentive Plan, which was approved by the Board of Directors and stockholders of the Company in November 2003 and in January 2004, respectively. The 2004 Stock Incentive Plan provides for the grant of stock options and other stock-based awards to employees, officers, consultants, independent contractors and directors providing services to us and our subsidiaries as determined by the Board or by the Compensation Committee. The types of awards that may be granted under the 2004 Stock Incentive Plan are stock options, stock appreciation rights, restricted stock, restricted stock units, performance awards, dividend equivalents, other stock grants, other stock-based awards and any combination thereof. Stock options are granted based on the fair market value of a share on the date of grant of such option. The terms, time and method of the options are determined at the sole discretion of the Compensation Committee.

At the time he joined in the Company in April 2009, Mr. Muniz did not receive any stock-based compensation. After completion of the Company's financing in October 2009, pursuant to his Employment Agreement, Mr. Muniz received stock options to purchase a total of 500,000 shares of common stock. The Compensation Committee determined that this was an appropriate grant in light of prior grants made to the Company's former CEO, Mr. Muniz's success in obtaining financing for the Company in very difficult market conditions and the need to provide Mr. Muniz with additional incentive to create further value for the Company's stockholders.

Incentive Compensation. The primary purpose is to align the interests of the executive officers with those of the stockholders by rewarding executive officers for creating stockholder value over the long-term. The 2004 Stock Incentive Plan provides for the award of stock options, stock appreciation rights, restricted stock, restricted stock units, performance awards, dividend equivalents, and other stock grants or stock based awards.

Other Benefits. The CEO is eligible to participate in the Company's 401(k) plan, health and dental coverage, life insurance, disability insurance, paid time off and paid holidays on the same terms as are available to all employees generally. Other benefits available to the CEO are the payment of reasonable costs of temporary housing, reasonable airfare associated with relocation and relocation assistance. The CEO's compensation is designed to be competitive with overall market practices, and is in place to attract and retain the personnel needed in the business.

Post-termination Agreements. Other than severance payments provided for in Mr. Muniz's Employment Agreement and Ms. Shogen's Retirement Agreement, as described below, the Company does not utilize post-termination agreements. In addition, under grants awarded pursuant to the 2004 Stock Incentive Plan, the recipients of such grants have received Stock Option Agreements which contain provisions that allow for the awarded options to become fully vested and immediately exercisable or exercisable during the six months following a change in control but in no event beyond the option period provided in the Stock Option Agreement; provided, however, that the terms of Mr. Muniz's Employment Agreement, as described above, supersede the terms set forth in his Stock Option Agreement. Per the Company's standard Stock Option Agreement, a change in control is deemed to occur if (i) a person, as defined by Section 13 (d) and 14 (d) of the Exchange Act, becomes the beneficial owner, directly or indirectly, of securities representing 20% or more of the combined voting power of the Company's then outstanding shares (except that ownership by the McCash Family Limited Partnership must be 50% to qualify as a change in control); (ii) during any 12 month period, the individuals who were, at the beginning of such period, a majority of the Board cease to be a majority of the Board; (iii) the Company's stockholders approve a merger or consolidation with

another corporation except where the Company remains in control after such merger or consolidation or where the merger or consolidation was effected to recapitalize the Company and no one person acquired more than 50% of the combined voting power of the Company; or (iv) the stockholders of the Company approve a plan of complete liquidation or enter into an agreement for the sale or disposition of all or substantially all of the assets of the Company.

Additionally, under the terms of the Stock Option Agreements issued under the 2004 Stock Incentive Plan, if there is a termination of service due to the death, total disability or retirement of the optionee on or after age 65 after seven years of service with the Company, then the options become fully exercisable at the time of death, total disability or retirement, as the case may be, and may be exercised by the optionee or optionee's estate during the six months following the month of optionee's death, total disability or retirement but in no event beyond the option period provided in the Stock Option Agreement. If there is a termination of employment due to voluntary resignation then to the extent options are exercisable as of the date of the termination, such options may be exercised within six months of the date of termination of employment. If there is termination for cause, then to the extent options are exercisable as of the date of the termination, such options may be exercised within 30 days of the date of termination. "Cause" is defined as (i) frequent and unjustifiable absenteeism other than optionee's illness or physical or mental disability; (ii) fraud or dishonesty materially injurious to the Company; (iii) gross or willful misconduct or willful neglect to act which is committed or omitted by optionee in bad faith; (iv) gross breach of optionee's fiduciary duties which has a materially injurious effect on the Company; (v) optionee's conviction as a felon; or (vi) optionee's willful or continuous neglect or refusal to perform his or her duties. If there is termination for any reason other than those described above, then to the extent options are exercisable as of the date of the termination, such options may be exercised within 12 months of the date of termination of employment.

Under grants awarded pursuant to the Company's 1997 and 1993 Stock Option Plans, prior to a dissolution or liquidation of the Company or a merger or consolidation where the Company is not the surviving corporation, the optionee has the right to exercise all outstanding options. If the optionee terminates employment, then to the extent options are exercisable as of the date of termination, such options may be exercised within 190 days of the date of termination of employment. If the Board determines that the optionee engaged in activities or employment contrary to the best interest of the Company, then the Board can cancel the options within 190 days of the termination of employment. If an optionee dies while still in service to the Company, then to the extent options are exercisable as of the date of death, such options may be exercised.

The rationale for the acceleration of the options under the 2004 Stock Incentive Plan, and the 1997 and 1993 Stock Option Plans upon a change in control of the Company is to ensure that officers are motivated to pursue creating or obtaining the maximum value for stockholders and to encourage officers to remain with the Company after a change in control has occurred.

Kuslima Shogen, the Company's former CEO and scientific founder, retired on March 31, 2009. On April 25, 2008, we entered into a Retirement Agreement with Ms. Shogen. Under the terms of the Retirement Agreement, during the two year period commencing April 1, 2008, Ms. Shogen was entitled to receive periodic payments at the rate of $300,000 per year. The options to purchase the Company's common stock held by Ms. Shogen on the date of her retirement remained exercisable after Ms. Shogen's retirement in accordance with their terms. No change was made to the terms of such existing options under the Retirement Agreement, except the Compensation Committee of the Company's Board of Directors amended the Company's 1993 Stock Option Plan and 1997 Stock Option Plan to allow such options to be transferred by Ms. Shogen to members of her family. The Compensation Committee agreed to give Ms. Shogen the ability to transfer her existing options granted under the 2004 Stock Incentive Plan to members of her family. If Ms. Shogen elects COBRA continuation coverage after her retirement date, the Company will pay for Ms. Shogen's COBRA insurance continuation premiums until the earliest of the second anniversary of her retirement date and the date Ms. Shogen is no longer eligible for COBRA insurance overage under applicable law or the date on which Ms. Shogen becomes eligible for Medicare. In the event Ms. Shogen becomes ineligible for COBRA coverage under the Company's insurance plans for any reason other than her death prior to the second anniversary of her retirement date, the Company will make a lump sum cash payment to Ms. Shogen equal to the amount of the premiums the Company would have had to pay to maintain Ms. Shogen's coverage under the Company's insurance plans had Ms. Shogen remained eligible for coverage under such plans for the period commencing on the date Ms. Shogen became ineligible for such coverage and ending on the second anniversary of her retirement date.

45

Pursuant to the terms of the Retirement Agreement, Ms. Shogen also agreed to terminate the Royalty Agreement dated July 24, 1991, as amended on April 16, 2001 by and between the Company and Ms. Shogen. In exchange for termination of the Royalty Agreement, the Company agreed to make the following payments and awards to Ms. Shogen:

- A lump sum payment of $500,000 made within ten business days of the date of the Retirement Agreement, from which we were entitled to deduct the amount of the outstanding principal and accrued interest of $187,410 owed by Ms. Shogen to us as of the date of the Retirement Agreement.

- If the NDA for ONCONASE®for the treatment of malignant mesothelioma is approved by the FDA, Ms. Shogen would receive a one time payment equal to 5% of the initial milestone payment payable to the Company by Par Pharmaceutical Inc. or Par pursuant to the License Agreement dated as of January 14, 2008 by and between the Company and Par, or the License Agreement.

- If the NDA for ONCONASE® for the treatment of malignant mesothelioma is approved by the FDA, Ms. Shogen would also receive a payment of $350,000 on each of the first and second anniversaries of the date of such approval for a total payment of $700,000.

- An option to purchase an aggregate of 1,000,000 shares of the Company's common stock under the 2004 Stock Incentive Plan at an exercise price equal to the fair market value of the common stock as of the date of the Retirement Agreement as determined under such plan. The option has a term of ten years and will become exercisable only upon the approval by the FDA of the NDA for ONCONASE® for the treatment of malignant mesothelioma. As the result of the option to purchase 250,000 shares of common stock granted under the 2004 Stock Incentive Plan to Ms. Shogen on March 5, 2008 in connection with the Company's execution of the License Agreement and in order to enable the Company to grant this option to Ms. Shogen, the Board of Directors amended the annual award limitation for a participant in the 2004 Stock Incentive Plan for 2008 as it relates to Ms. Shogen from 1,000,000 shares to 1,250,000 shares.

- Payments equal to 15% of any royalties payable with respect to net sales which are received by us pursuant to any and all license agreements entered into by us for the marketing and distribution of ONCONASE® and any other products derived from amphibian source extract, produced either as a natural, synthesized, and/or genetically engineered drug which are covered by the claims of any issued patent owned or controlled by us which is issued and valid as of December 31, 2007, or the Licensed Products, and 5% of net sales of Licensed Products which we book on our financial statements but only to the extent that the aggregate annual net sales of Licensed Products upon which such royalty payments are received by us and annual net sales of Licensed Products booked by us when combined are in excess of $100 million in a year. In the event either or both of the aggregate annual net sales of Licensed Products upon which we receive royalties and the annual net sales of Licensed Products which we book on our financial statements are less than $100 million, but when combined such aggregate annual net sales exceed $100 million, the payments to be received by Ms. Shogen in that year will be paid with respect to the

amount of such aggregate net sales that exceeds $100 million and pro rated between the 15% Ms. Shogen is entitled to receive on royalties received by us and the 5% Ms. Shogen is entitled to receive on net sales booked by us based upon the percentage of the total net sales of the Licensed Products that year represented by aggregate net sales upon which we receive a royalty and the net sales booked by us. Ms. Shogen's rights to receive these payments shall terminate when all claims under the relevant patents which cover the Licensed Products have expired.

On September 14, 2009, the Company entered into an amendment to the Retirement Agreement amending certain terms. Under the Retirement Agreement, Ms. Shogen was entitled to receive periodic payments during the two year period commencing April 1, 2008 at the rate of $300,000 per year. Pursuant to the amendment, the periodic payments were reduced to $150,000 per year. Under the Retirement Agreement, Ms. Shogen was entitled to receive continuing payments equal to 15% of any royalties received by us pursuant to any and all license agreements entered into by us for the marketing and distribution of Licensed Products. Under the amendment, the amount of such royalties related to net sales of Licensed Products to be received by Ms. Shogen has been reduced to 5%. Under the Retirement Agreement, Ms. Shogen was entitled to receive continuing payments equal to 5% of net sales of Licensed Products booked by us on our financial statements. Under the amendment, the amount of such net sales booked by us has been reduced to 2% of net sales. Under the amendment, in the event we obtain marketing approval for ONCONASE® from the FDA or the European Medicines Agency, Ms. Shogen will be entitled to receive an additional payment equal to the difference between the continuing payments actually paid to Ms. Shogen during the two year period commencing April 1, 2008 and $600,000, the original aggregate amount of continuing payments to which Ms. Shogen was entitled under the Retirement Agreement. Such additional payment may be made by us, at our option, in cash, common stock or a combination of both. Except as specifically amended in the Amendment, all terms and conditions of the Retirement Agreement remain in full force and effect.

The following table summarizes the estimated value of the stock options for each named executive officer derived from the terms of the 2004 Stock Incentive Plan, the 1997 Stock Option Plan and the 1993 Stock Option Plan assuming that a triggering event took place on the last business day of our most recently completed fiscal year, July 31, 2009 and that the price per share of our common stock is the closing market price as of that date.

Name	Death or Total Disability(1)	Voluntary Termination or Termination for Cause(1)	Change in Control(1)
Charles Muniz	$0	$0	$0
Kuslima Shogen(2)	$1,380	$1,380	$1,380
Lawrence Kenyon(3)	$0	$0	$0

(1) These amounts represent the aggregate in-the-money value of stock options which would become vested as a direct result of the termination event or change in control before the applicable stated vesting date. The stated vesting date is the date at which an award would have vested absent such termination event or change in control. This calculation of value does not attribute any additional value to stock options based on their remaining terms and does not discount the value of awards based on the portion of the vesting period elapsed at the date of the termination event or change in control. These amounts represent the intrinsic value of stock options, based on a closing stock price of $0.28 on July 31, 2009.

(2) Kuslima Shogen retired from the Company in March 31, 2009 and resigned from the Board on January 29, 2010.

(3) Lawrence Kenyon resigned as the Company's President and CFO on December 12, 2008 and as Corporate Secretary and member of the Board on April 2, 2009.

Pension Plans. The Company does not have pension plans for its employees, executive officers or directors.

Non-Qualified Deferred Compensation Plans. The Company does not have non-qualified deferred compensation plans for its employees, executive officers or directors.

Tax and Accounting Considerations

Deductibility of Executive Compensation. In making compensation decisions affecting the executive officers, the Compensation Committee considers the Company's ability to deduct under applicable federal corporate income tax law compensation payments made to executives. Specifically, the Compensation Committee considers the requirements and impact of Section 162(m) of the Internal Revenue Code, which generally disallows a tax deduction for annual compensation in excess of $1 million paid to our named executive officers. Certain compensation that qualifies under applicable tax regulations as "performance-based" compensation is specifically exempted from this deduction rule. The Compensation Committee cannot assure that it will be able to fully deduct all amounts of compensation paid to persons who are named executive officers in the future. Further, because the Compensation Committee believes it is important to preserve flexibility in designing its compensation programs, it has not adopted a policy that all compensation must qualify as deductible under Section 162(m). The cash compensation that the Company paid to each of its named executive officers during 2009 was below $1 million. We believe that stock options granted to named executive officers under the 1997 Stock Option Plan and the 2004 Stock Incentive Program would qualify as "performance-based compensation" and therefore are Section 162(m) qualified.

Accounting for Stock Based Compensation. On August 1, 2005, the Company adopted the fair value recognition provisions of the amended guidance on ASC Stock Compensation to account for all stock grants under all of its stock

plans.

COMPENSATION OF EXECUTIVE OFFICERS

Summary Compensation Table

The following table provides a summary of cash and non-cash compensation for each of the last three fiscal years ended July 31, 2009, 2008 and 2007 with respect to the one person who served as our CEO and the two other people who served as our only other executive officers during the year ended July 31, 2009, collectively referred to as the Named Executive Officers.

Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)(1)	Non-Equity Incentive Plan Compensation	Non-Qualified Deferred Compensation Earnings ($)	All Other Compensation ($)(2)	Total ($)
Charles Muniz President, CEO and CFO (3)	2009	87,500 (4)	-		-	-	-	11,041(5)	98,541
Kuslima Shogen	2009	207,692	-		-	-	-	139,241(7)	346,933
	2008	278,877	-		2,305,000	-	-	525,514(8) (9)	3,109,391
	2007	233,688	-		565,460	-	-	24,026(10)	823,174
Former CEO (6)									
Lawrence A. Kenyon	2009	109,615							109,615
	2008	215,231	42,000		-	-	-	6,990(12)	264,221
	2007	104,192(13)	-		666,875	-	-	38,157(14)	809,224
Former President, CFO and Corporate Secretary (11)									

(1) These amounts represent the dollar amount recognized for financial statement reporting purposes the grant date fair value of stock options granted to the named executive officers in accordance with ASC Stock Compensation. The grant date fair value was estimated using the Black-Scholes stock option pricing model in accordance with ASC Stock Compensation. Pursuant to the SEC rules, the amounts exclude the impact of estimated forfeitures related to service-based vesting conditions. Valuation assumptions used in the calculation are as disclosed in Note 7 to the financial statements for the year ended July 31, 2009 filed with this prospectus.

(2) Excludes perquisites and other personal benefits that in the aggregate do not exceed $10,000. These amounts consist of our annual contributions to a 401(k) plan unless otherwise noted.

(3) Mr. Muniz was appointed as the Company’s President, COO and CFO and director to the Board on April 3, 2009.

(4)

Mr. Muniz initially began consulting with the Company on February 9, 2009. On April 3, 2009, Mr. Muniz was appointed as the Company's President, COO and CFO. Given the Company's difficult financial condition, Mr. Muniz continued to receive consulting payments from the date he first began consulting with the Company continuing through October 19, 2009. This amount represents consulting fees from his first day of employment through July 31, 2009.

(5) This amount consists of travel cost between Mr. Muniz' home state of Florida and New Jersey for a period of six months totaling $5,218 and health insurance reimbursement of $5,823 for fiscal year 2009.

(6) Ms. Shogen retired from the Company on March 31, 2009 and resigned from the Board on January 29, 2010.

(7) This amount consists of post-retirement payments of $126,923, our annual contribution to a 401(k) plan totaling $3,461 and a monthly auto allowance totaling $8,857 for fiscal year 2009.

(8) $500,000 of this amount a lump sum payment as part of Ms. Shogen's Retirement Agreement in exchange for the termination of the Royalty Agreement.
(9) $25,514 of this amount consists of our annual contribution to a 401(k) plan totaling $9,999, a monthly auto allowance totaling $12,997 for fiscal year 2008 and premiums paid by the Company on a life insurance policy on Ms. Shogen totaling $2,518. The Company is not the beneficiary of the life insurance policy.
(10) This amount consists of our annual contribution to a 401(k) plan totaling $6,738, a monthly auto allowance totaling $13,000 for fiscal year 2007 and premiums paid by the Company on a life insurance policy on Ms. Shogen totaling $4,288. The Company is not the beneficiary of the life insurance policy.
(11) Mr. Kenyon resigned as the Company's President and CFO on December 12, 2008 and as Corporate Secretary and director on the Board on April 2, 2009.
(12) This amount consists of our annual contribution to a 401(k) plan.
(13) Represents salary for period commencing on January 16, 2007, Mr. Kenyon's first day of employment with the Company, through July 31, 2007.
(14) As part of Mr. Kenyon's employment arrangements approved by the Board, the Company provided for moving expenses totaling $9,146 and cost of travel between his home state of Illinois and New Jersey for a period of 12 months totaling $29,011. We made no contributions to Mr. Kenyon's 401(k) plan during the fiscal year ended July 31, 2007.

Grants of Plan-Based Awards in Fiscal Year 2009

There were no grant of stock options under equity and non-equity incentive plans to the Named Executive Officers during the fiscal year ended July 31, 2009.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth the information with respect to the Named Executive Officers concerning the exercisable and unexercisable stock option awards held as of July 31, 2009

Name (1)	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date
Kuslima Shogen(2)	23,000(3)	-	-	$0.85	8/21/09
	23,000(3)	-	-	$0.49	10/4/09
	23,000(3)	-	-	$0.49	10/7/09

	69,000(3)	-	-	$0.26	10/7/09
	30,000(3)	-	-	$1.58	9/19/09
	90,000(3)	-	-	$1.58	10/7/09
	150,000(3)	-	-	$6.73	10/7/09
	100,000(3)	-	-	$6.73	3/31/10
	100,000(3)	-	-	$1.61	10/7/09
	72,000(3)	-	-	$1.29	10/7/09
	250,000(3)	-		$2.18	3/31/10
			1,000,000(4)	$2.00	4/25/18
Lawrence A. Kenyon(5)	225,000(3)	-	-	$1.55	8/17/09

(1) The Company does not have stock awards as part of its compensation program, therefore the columns entitled “Stock Awards” have been omitted from this table.
(2) Ms. Shogen retired from the Company on March 31, 2009.
(3) These options expired on their respective expiration dates.
(4) These performance options are only exercisable upon the meeting of the conditions set out in Ms. Shogen’s Retirement Agreement as described above.
(5) Mr. Kenyon resigned as the Company’s President and CFO on December 12, 2008 and as Corporate Secretary and director on April 2, 2009.

Option Exercises and Stocks Vested

The Named Executive Officers did not exercise options during fiscal year 2009 and the Company did not grant stock awards as part of its compensation program.

NON-EMPLOYEE DIRECTORS' COMPENSATION

In February 2007, the Board adopted a non-employee director compensation policy whereby each member of the Board who was not an employee of our company will receive $15,000 per year in consideration of the member's serving on the Board, payable in four equal quarterly installments. In addition, each non-employee director will be granted an annual retainer of 20,000 options on the last trading day of December for each year under the 2004 Stock Incentive Plan. The Chairman of the Board will receive an option bonus equal to the number of options received by the Chairman for his board and committee memberships. Committee chairpersons receive 10,000 options for each committee chaired while each committee member receives 5,000 options for each committee on which he serves. The exercise price of the options will be equal to the closing price of the common stock on the date of the grant. The options will vest on the first anniversary of the date of the grant provided that the option holder remains a director as of such anniversary date and the options will terminate on the sixth anniversary of the date of the grant.

On October 20, 2009, the Company closed on a private placement of convertible promissory notes and warrants in which the Company received $3,250,000 in gross proceeds on October 19, 2009. As a condition to the closing of such financing, each member of the Board other than David Sidransky, Chairman of the Board, and Mr. Muniz agreed to resign from the Board upon the request of Dr. Sidransky made at any time following the closing and December 31, 2009. In connection with such condition, the Board amended the vesting of the options granted on December 31, 2008 to non-employee directors, except for Dr. Sidransky, to be accelerated in full upon their resignation as requested by the Chairman of the Board. Additionally, with the exception of Dr. Sidransky, the terms of the options granted to non-employee directors on February 8, 2007, December 31, 2007 and December 31, 2008 were amended to provide that if the non-employee director leaves the Board, the option will be exercisable for two years, instead of one year, from the date such non-employee director leaves the Board any time between October 19, 2009 and December 31, 2009.

In January 2009, the Board ceased the non-employee director compensation; however, on April 27, 2010, the Board made the following option grants to our non-employee directors as compensation for their service on the Board: (i) options to purchase 180,000 shares of common stock to Dr. Sidransky, (ii) options to purchase 125,000 shares of common stock to Mr. Brancaccio, and (iii) options to purchase 125,000 shares of common stock to Dr. Weiss, each at an exercise price of $0.26 per share and with a vesting date of December 31, 2010.

Under our director compensation policies, directors who also serve as executive officers do not receive additional compensation for their service on our Board.

The exercise price and vesting schedules for the regular and discretionary option grants described above are set forth in the table titled "Directors' Stock Options" below. The total compensation paid to independent directors for their service as directors of the Company for fiscal year 2009 is set forth in the table titled "Directors' Compensation" below.

Name	Fees Earned or Paid in Cash(1) ($)	Stock Awards ($)	Option Awards(2) ($)	Non-Equity Incentive Plan Compensa-tion ($)	Change in Pension Value and Nonqualified Deferred Compensation Earnings ($)	All Other Compen-sation ($)	Total ($)
John P. Brancaccio	$7,500	-	$5,600	-	-	-	$13,100
Stephen K. Carter, M.D. (3)	$7,500	-	$4,000	-	-	-	$11,500
Donald R. Conklin (4)	$7,500	-	$4,800	-	-	-	$12,300
James J. Loughlin(5)	$7,500	-	$5,600(5)	-	-	-	$13,100
David Sidransky, M.D.	$7,500	-	$14,400	-	-	-	$21,900
Paul Weiss, Ph.D.	$7,500	-	$8,000	-	-	-	$15,500

During the fiscal year ended July 31, 2009, the following independent or non-employee directors were compensated as follows for their service as directors of the Company:

(1) These amounts represent the retainer paid for services as director.

(2) These amounts represent the dollar amount recognized for financial statement reporting purposes for the fair value of stock options granted to non-employee directors for fiscal year 2009. The grant date fair value of the options was estimated using the Black-Scholes stock option pricing model in accordance with ASC Stock Compensation. Valuation assumptions used in the calculation are as disclosed in Note 7 to the financial statements for the year ended July 31, 2009 filed with this prospectus.

(3) Mr. Carter did not stand for reelection on our April 27, 2010 Annual Stockholders Meeting and is currently no longer on our Board of Directors.

(4) Mr. Conklin resigned as a member of the Board on January 29, 2010.

(5) Mr. Loughlin resigned as a member of the Board on March 5, 2009. The stock options granted to him in December 2008 were forfeited.

Directors' Stock Options

During the fiscal year ended July 31, 2009, the following independent or non-employee directors were granted options under our 2004 Stock Incentive Plan as described above:

Name	Number of Options Granted(1)	Exercise Price of Options Granted
John P. Brancaccio	35,000(2)	$0.24

Stephen K. Carter, M.D. (3)	25,000(4)	$0.24
Donald R. Conklin (5)	30,000(6)	$0.24
James J. Loughlin(7)	35,000(8)	$0.24
David Sidransky, M.D.	90,000(9)	$0.24
Paul M. Weiss, Ph.D.	50,000(10)	$0.24

(1) All the options listed here were granted on December 31, 2008, vest on December 31, 2009, provided that the option holder continuously remains a director until such time, and expire on December 31, 2014. The exercise price of these options was the closing price of the Company's common stock on the date of the grant. As described above, these options will be accelerated in full upon the resignation of the non-employee director, except Dr. Sidransky, as requested by the Chairman of the Board any time between October 19, 2009 and December 31, 2009.

(2) Mr. Brancaccio's options are the result of his serving on the Audit Committee and as Chairman of the Compensation Committee.

(3) Mr. Carter did not stand for reelection on our April 27, 2010 Annual Stockholders Meeting and is currently no longer on our Board of Directors.

(4) Dr. Carter's' options are the result of his serving on the Research and Clinical Oversight Committee.

(5) Mr. Conklin resigned as a member of the Board on January 29, 2010.
(6) Mr. Conklin's options are the result of his serving on the Compensation Committee and Commercial and Business Development Oversight Committee.
(7) Mr. Loughlin resigned as a member of the Board on March 5, 2009.
(8) Mr. Loughlin's options are the result of his serving on the Corporate Governance and Nominating Committee and as Chairman of the Audit Committee. Mr. Loughlin resigned as a member of the Board on March 5, 2009 and these options were forfeited as a result of his resignation.
(9) Dr. Sidransky's options are the result of his serving as Chairman of the Board, Chairman of the Corporate Governance and Nominating Committee, Chairman of the Research and Clinical Oversight Committee and a member of the Commercial and Business Development Oversight Committee.
(10) Dr. Weiss' options are the result of his serving on the Compensation Committee, the Corporate Governance and Nominating Committee, the Audit Committee, the Research and Clinical Oversight Committee and as Chairman of the Commercial and Business Development Oversight Committee.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth the information with respect to the independent or non-employee directors concerning exercisable and unexercisable stock options held as of July 31, 2009:

Name (1)	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
John P. Brancaccio	13,750(2)	-	$3.74	12/30/09
	20,000	-	$4.38	12/30/10
	20,000	-	$1.89	12/30/11
	20,000	-	$1.60	12/30/12
	15,000	-	$1.49	02/08/13
	35,000	-	$1.72	12/31/13
	-	35,000(3)	$0.24	12/31/14
Stephen K. Carter, M.D. (4)	15,000(5)	-	$3.78	12/30/09
	20,000	-	$4.38	12/30/10
	20,000	-	$1.89	12/30/11
	20,000	-	$1.60	12/30/12
	5,000	-	$1.49	02/08/13
	25,000	-	$1.72	12/31/13
	-	25,000(3)	$0.24	12/31/14
Donald R. Conklin (5)	15,000(2)	-	$3.78	12/30/09
	20,000	-	$4.38	12/30/10
	20,000	-	$1.89	12/30/11
	20,000	-	$1.60	12/30/12
	10,000	-	$1.49	02/08/13
	30,000	-	$1.72	12/31/13

	-	30,000(3)	$0.24	12/31/14
James J. Loughlin(6)	13,750(2)	-	$3.74	9/11/09
	20,000(2)	-	$4.38	9/11/09
	20,000(2)	-	$1.89	9/11/09
	20,000(2)	-	$1.60	9/11/09
	15,000(2)	-	$1.49	9/05/09
	35,000(2)	-	$1.72	9/05/09
	-	35,000(3)(7)	$0.24	12/31/14
David Sidransky, M.D.	8,750(2)	-	$8.18	12/30/09
	20,000	-	$4.38	12/30/10
	20,000	-	$1.89	12/30/11
	20,000	-	$1.60	12/30/12
	70,000	-	$1.49	02/08/13
	90,000	-	$1.72	12/31/13
	-	90,000(3)	$0.24	12/31/14

Paul M. Weiss, Ph.D.	15,000(2)	-	$3.78	12/30/09
	20,000	-	$4.38	12/30/10
	20,000	-	$1.89	12/30/11
	20,000	-	$1.60	12/30/12
	30,000	-	$1.49	02/08/13
	50,000	-	$1.72	12/31/13
	-	50,000(3)	$0.24	12/31/14

(1) The Company does not have stock awards as part of its compensation program, therefore the columns entitled "Stock Awards" have been omitted from this table.
(2) These options expired on their respective expiration dates.
(3) These options vested on December 31, 2009, provided that the option holder continuously remained a director as of December 31, 2009.
(4) Mr. Carter did not stand for reelection on our April 27, 2010 Annual Stockholders Meeting and is currently no longer on our Board of Directors.
(5) Mr. Conklin resigned as a member of the Board on January 29, 2010.
(6) Mr. Loughlin resigned as a member of the Board on March 5, 2009.
(7) These options were forfeited as a result of Mr. Loughlin's resignation.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

During the fiscal year ended July 31, 2009, the members of the Board who served on the Compensation Committee were Messrs. John P. Brancaccio, Donald R. Conklin (resigned subsequently) and Paul M. Weiss, Ph.D. All such directors were independent directors and have never been our officers. During the fiscal year ended July 31, 2009, no executive officer of us served on the compensation committee or board of directors of any other entity which had any executive officer who also served on the Compensation Committee or Board.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Company recognizes that related party transactions can create the appearance that Company decisions are made based on factors other than the Company's best interest or the best interest of the Company's stockholders. Related party transactions can also create potential or actual conflicts of interest between the Company and the related party. For purposes of Item 404 of Regulation S-K, related person transactions are transactions which exceed $120,000 in the aggregate or 1% of the average of the Company's total assets at year end for the last three completed fiscal years, to which the Company and a related party with a direct or indirect material interest, participated. The Company's Code of Business Conduct and Ethics requires that any such related party transactions be specifically approved by the Audit Committee. In addition directors, officers and employees must notify the Ethics Officer or the Chair of the Audit Committee of the existence of any actual or potential conflicts of interest. The Audit Committee performs a review of related party transactions as part of its review of our Annual Reports on Form 10-K.

The Company was a party to the following transactions in which the amount involved exceeded $120,000 and in which any executive officers, directors, holders of more than 5% of our capital stock and members of such person's immediate families had or will have a direct or indirect material interest.

Fiscal Year 2007

At fiscal year ended July 31, 2007, $180,397 were due to the Company from Kuslima Shogen, the Company's former CEO, from which the Company earned 8% interest in the amount of approximately $9,500 on the unpaid principal balance for fiscal year 2007. This loan was made prior to July 30, 2002 and has not since been materially modified, thus it is not in violation of the Sarbanes-Oxley Act of 2002.

On July 23, 1991, the Board agreed to pay Ms. Shogen an amount equal to 15% of any gross royalties which the Company may receive from any license(s) with respect to the Company's lead drug product candidate, ONCONASE®, or any other products derived from amphibian source extract, produced either as a natural, synthesized, and/or genetically engineered drug for which the Company is the owner or co-owner of the patents, or acquires such rights in the future, for a period not to exceed the life of the patents. If the Company manufactures and markets any of these drugs, then Ms. Shogen will receive an amount equal to 5% of gross sales from any products sold during the term of the patents. On April 16, 2001, this agreement was amended and clarified to provide that Ms. Shogen would receive the 15% royalty payment relating to licenses or 5% of net sales relating to sales but not both, unless both the Company and the licensee market the licensed product.

Fiscal Year 2008

Amounts due from a loan to Ms. Shogen totaling $180,397 were repaid in full plus interest in April 2008. The Company earned 8% interest on the unpaid principal balance in the amount of approximately $7,000 for fiscal year ended July 31, 2008. This loan was made prior to July 30, 2002 and has not since been materially modified.

In addition, see the discussion of the Retirement Agreement and arrangements related thereto by and between the Company and the Company’s former CEO, Kuslima Shogen, set forth above in the Post-Termination Agreement subsection of the “Compensation and Discussion Analysis”.

In fiscal year 2009, March 2008 and September 2008, the Company engaged Champions Biotechnology, Inc. to provide certain services for approximately $12,300 and $81,200, respectively. The Company’s non-executive Chairman of the Board of Directors, Dr. David Sidransky, is also the Chairman of the Board of Directors as well as a principal stockholder of Champions Biotechnology, Inc. As of July 31, 2009, the agreed amount was paid in full.

On October 20, 2009, the Company announced that it completed a sale of 65 Units in a private placement to certain investors pursuant to a securities purchase agreement entered into on October 19, 2009. Each Unit consists of (i) $50,000 principal amount of 5% Senior Secured Convertible Notes convertible into shares of the Company’s common stock, (ii) Series A Warrants to purchase in the aggregate that number of shares of common stock initially issuable upon conversion of the aggregate amount of Notes issued as part of the Unit, at an exercise price of $0.15 per share with a three year term and (iii) Series B Warrants to purchase in the aggregate that number of shares of common stock initially issuable upon conversion of the aggregate amount of Notes issued as part of the Unit, at an exercise price of $0.25 per share with a five year term. The closing of the Offering occurred on October 19, 2009 and the Company received an aggregate of $3,250,000 in gross proceeds. Charles Muniz, the Company’s President, CEO, CFO and a director, subscribed for 20 Units, certain trusts and individuals related to James O. McCash, a beneficial owner of more than five percent of the Company’s voting securities, subscribed for an aggregate of 20 Units, Europa International Inc., an affiliate of Knoll Capital Management LP, a beneficial owner of more than five percent of the Company’s voting securities, subscribed for 15 Units. The Company’s entry into an employment agreement with Mr. Muniz upon terms reasonably acceptable to the investors in the Offering was a condition to the Closing.

In addition, see the discussion of the Retirement Agreement and arrangements related thereto by and between the Company and the Company’s CEO, Kuslima Shogen, set forth above in the Post-Termination Agreement subsection of the “Compensation and Discussion Analysis”.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information as of March 12, 2010 concerning stock ownership of all persons known by the Company to own beneficially 5% or more of the outstanding shares of the Company's common stock.

54

Security Ownership of Certain Beneficial Owners

Name and address of beneficial owner or identity of group	Amount and Nature of Beneficial Ownership	Percent of shares outstanding(1)
Charles Muniz(2) c/o Tamir Biotechnology, Inc. 300 Atrium Drive Somerset, NJ 08873	21,609,999(3)	31.63%
Knoll Capital Management LP, Fred Knoll and Europa International, Inc. (4) 666 Fifth Avenue, Suite 3702 New York, NY 10103	19,030,520(5)	29.97%
McCash Family Limited Partnership N3810 S. Grand Oak Drive Iron Mountain, MI 49801	4,821,452(6)	9.9%
James O. McCash, and the James O. McCash Trust N3820 S. Grand Oak Drive Iron Mountain, MI 49801	2,910,820(7)	6.1%
Unilab LP 966 Hungerford Drive, Ste 3B Rockville, MD 20850	5,195,038(8)	9.99%

(1) The percentage of stock outstanding for each stockholder is calculated by dividing (i) the number of shares deemed to be beneficially held by such stockholder as of the date of the calculation by (ii) the sum of (A) the number of shares of common stock outstanding as of the date of the calculation, plus (B) the number of shares issuable upon conversion of securities convertible into shares of common stock and upon exercise of options or warrants held by such stockholder which were convertible or exercisable as of the date of the calculation or which will become exercisable within 60 days after the date of the calculation, taken into consideration certain provisions in the warrants which limit the amount of shares that the warrant holders can exercise for.

(2) Mr. Muniz is the Company's President, CEO, CFO and a director.

(3) Includes (i) 310,000 shares of common stock owned by Mr. Muniz, (ii) 300,000 shares of common stock owned by Mr. Muniz' wife and (iii) 20,999,999 shares subject to a convertible note and warrants which are currently convertible or exercisable or which will become convertible or exercisable within 60 days after March 12, 2010.

(4) Knoll Capital Management LP, Fred Knoll and Europa International, Inc., or Europa, filed a Schedule 13D on December 7, 2009 with the SEC as joint filers.

(5) Includes (i) 2,010,985 shares of common stock owned by Europa. (ii) 840,963 shares held by Knoll Special Opportunities Fund Master Fund Ltd, or Knoll Fund, (iii)

15,750,000 shares of common stock subject to a convertible note and warrants which are currently convertible or exercisable or will become convertible or exercisable within 60 days of March 12, 2010 held by Europa and (iv) 428,572 shares subject to warrants which are currently exercisable or will become exercisable within 60 days of March 12, 2010 held by Europa and Knoll Fund. This information concerning the stock ownership of Knoll Capital Management LP, Fred Knoll and Europa. was obtained from the Schedule 13D filed by them with the SEC on December 7, 2009 and other information known to the Company.

(6) Includes 1,399,890 shares of common stock subject to warrants which are currently exercisable or will become exercisable within 60 days of March 12, 2010. This information concerning the stock ownership of the McCash Family Limited Partnership was obtained from the Schedule 13D/A filed with the SEC on January 8, 2007 and other information known to the Company.

(7) This information concerning the stock ownership of the James O. McCash, and the James O. McCash Trust was obtained from the Schedule 13G/A filed with the SEC on February 5, 2008 and other information known to the Company.

(8) Includes (i) 4,641,678 shares of common stock subject to notes and warrants which are currently exercisable or will become exercisable within 60 days of March 12, 2010, and (ii) 553,360 shares of common stock.

The table below shows the amount of our common stock beneficially owned (unless otherwise indicated) by our directors and the Named Executive Officers listed in the Summary Compensation Table individually, and our directors and Named Executive Officers as a group. All information is as of March 12, 2010.

Security Ownership of Management

Name and address of beneficial owner or identity of group(1)	Position	Amount and Nature of Beneficial Ownership(2)	Percent of shares outstanding(3)
Charles Muniz	President, CEO, CFO and Director	21,609,999(4)	31.63%
John P. Brancaccio	Director	151,300(5)	*
David Sidransky, M.D.	Chairman of the Board	355,000(6)	*
Paul M. Weiss, Ph.D.	Director	230,090(7)	*
All Named Executive Officers and directors as a group (4 persons)		22,346,389(8)	33.23%

* Represents less than 1% of our outstanding common stock.

(1) Unless otherwise indicated below, the persons in the above table have sole voting and investment power with respect to all shares beneficially owned by them. The address of all Named Executive Officers and directors is c/o Tamir Biotechnology, Inc., 300 Atrium Drive, Somerset, New Jersey, 08873.

(2) All shares listed are common stock. Except as discussed below, none of these shares are subject to rights to acquire beneficial ownership, as specified in Rule 13d-3(1) under the Exchange Act, and the beneficial owner has sole voting and investment power, subject to community property law where applicable.

(3) The percentage of stock outstanding for each stockholder is calculated by dividing (i) the number of shares deemed to be beneficially held by such stockholder as of March 12, 2010 by (ii) the sum of (A) the number of shares of common stock outstanding as of March 12, 2010 plus (B) the number of shares issuable upon exercise of options or warrants held by such stockholder which were exercisable as of March 12, 2010 or which will become exercisable within 60 days after December March 12, 2010.

(4) Includes 310,000 shares of common stock owned by Mr. Muniz, 300,000 shares of common stock owned by Mr. Muniz' wife and 20,999,999 shares subject to a convertible note and warrants which are currently convertible or exercisable or which will become convertible or exercisable within 60 days after March 12, 2010.

(5) Includes 145,000 shares underlying options which are currently exercisable or which will become exercisable within 60 days after March 12, 2010.

(6) Includes 310,000 shares underlying options which are currently exercisable or which will become exercisable within 60 days after March 12, 2010.

(7) Includes 6,535 shares of common stock owned by Mr. Weiss' wife and 190,000 shares underlying options which are currently exercisable or which will become exercisable within 60 days after March 12, 2010.

(8) Includes all shares owned beneficially by the directors and the executive officers named in the table.

SELLING SECURITY HOLDERS

We are registering the shares of common stock issuable upon the conversion of the Notes and exercise of the Warrants, including: (a) 24,916,667 shares of common stock that will be issued upon conversion of the Notes in the aggregate principal amount of $3,250,000, referred to as Note Shares, (b) 21,666,664 shares of common stock that will be issued upon the exercise of the Series A Warrants at $0.15 per share, referred to as Series A Warrant Shares, and (c) 21,666,664 shares of common stock that will be issued upon the exercise of the Series B Warrants at $0.25 per share, referred to as Series B Warrant Shares. The Notes and the Warrants were issued to the Selling Security Holders in a private placement which closed in October 2009. The Notes and the Warrants were issued in transactions exempt from the registration requirements of the 1933 Act under Section 4(2) of the 1933 Act to persons reasonably believed to be “accredited investors” as defined in Regulation D under the 1933 Act. Pursuant to the terms of the Securities Purchase Agreement under which the Notes and Warrants were issued, we agreed to file the Registration Statement of which this prospectus forms a part in order to permit those investors to sell the shares underlying the notes and warrants. Pursuant to Rule 416 under the Securities Act, the Registration Statement also purports to register such indeterminate number of shares of common stock as may become issuable by reason of stock splits, stock dividends, recapitalization and similar capital adjustments in accordance with the provisions of the notes and warrants.

SELLING SECURITY HOLDER TABLE

The table below lists the Selling Security Holders and other information regarding the beneficial ownership of the shares of common stock by each of the Selling Security Holders. The first column lists the number of Note Shares being offered pursuant to this prospectus by each of the Selling Security Holders. The second column lists the number of Series A Warrant Shares being offered pursuant to this prospectus by each of the Selling Security Holders. The third column lists the number of Series B Warrant Shares being offered pursuant to this prospectus by each of the Selling Security Holders. The fourth column lists total number of common stock held by each Selling Security Holder before any offering pursuant to this prospectus. The fifth column lists the shares of common stock being offered pursuant to this prospectus by each of the Selling Security Holders. The six column lists the number of shares that will be beneficially owned by the Selling Security Holders assuming all of the shares offered pursuant to this prospectus are sold and that shares beneficially owned by them, but not offered hereby are not sold. The Selling Security Holder Table and the footnotes to the table are prepared based on the Company’s records as of April 26, 2010 and the completed selling stockholder questionnaires the Company has received.

The inclusion of any securities in the following table does not constitute an admission of beneficial ownership by the persons named below. Except as indicated in the footnotes to the table, no Selling Security Holder has had any material relationship with us or our predecessors or affiliates during the last three years.

Name	Note Shares	Series A Warrant Shares	Series B Warrant Shares	Total Shares	Shares being Offered	Share Owne after Offeri (1)
Europa International, Inc. (Knoll Capital Management LP)(2), (3)	5,750,000	5,000,000	5,000,000	19,030,520(4)	15,750,000	3,280,5
Charles Muniz (5)	7,666,667	6,666,666	6,666,666	21,609,999 (6)	20,999,999	610,0

Unilab LP (Francis Patrick Ostronic(2)), (7)	3,833,333	3,333,333	3,333,333	11,053,359 (8)	10,499,999	553,3
Mary M. McCash Trust Declaration Declared October 20, 2008 (Mary M. McCash(2)), (9)	1,533,333	1,333,333	1,333,333	4,199,999	4,199,999	
The Michael J. McCash Living Trust (Michael J. McCash(2)), (10)	1,533,333	1,333,333	1,333,333	4,199,999	4,199,999	
Coleen A. Lowe (11)	1,533,333	1,333,333	1,333,333	4,199,999	4,199,999	
Corinne M. Poquette (12)	1,533,333	1,333,333	1,333,333	4,199,199	4,199,999	
David J. McCash (13)	1,533,333	1,333,333	1,333,333	4,199,199	4,199,999	
Total	24,916,667	21,666,664	21,666,664	72,693,875	68,249,995	4,443,8

(1) Assumes that all of the shares offered hereby are sold and that shares owned before the offering but not offered hereby are not sold.
(2) Person who has voting and the power to vote, sell, transfer or otherwise dispose of the common stock.
(3) Address: c/o Knoll Capital Management, 1114 Avenue of Americans, 45th Floor, New York, NY 10036. Europa International, Inc., together with Knoll Capital Management LP and Fred Knoll, with whom it filed a Schedule 13D on December 7, 2009 with the SEC as joint filers, is a significant shareholder of the Company that owns more than 5% of the total outstanding shares of common stock of the Company.
(4) Includes (i) 2,010,985 shares of Common Stock owned by Europa, (ii) 840,963 shares held by Knoll Fund, (iii) 15,750,000 shares of common stock issuable upon conversion of the Notes and exercise of the Warrants held by Europa and (iv) 428,572 shares subject to warrants which are currently exercisable or will become exercisable within 60 days of March 12, 2010 held by Europa and Knoll Fund.
(5) Address: c/o Tamir Biotechnology, Inc., 300 Atrium Drive, Somerset, NJ 08873. Mr. Muniz is the Company's President, CEO, CFO and a director.
(6) Includes (i) 20,999,999 shares of common stock issuable upon conversion of the Notes and exercise of the Warrants, (ii) 310,000 shares of common stock owned by Mr. Muniz, and (iii) 300,000 shares of common stock owned by Mr. Muniz' wife.
(7) Address: 966 Hungerford Drive, Ste 3B, Rockville, MD 20850. In July 2007, in connection with a Distribution and Marketing Agreement with USP Pharma Spolka Z.O.O., an affiliate of US Pharmacia, we entered into a Securities Purchase Agreement with Unilab LP, an affiliate of US Pharmacia, pursuant to which we issued a total of 553,360 shares of restricted common stock Unilab LP for approximately $1.4 million, or $2.53 per share.
(8) Includes (i) 10,499,999 shares of common stock issuable upon conversion of the Notes and exercise of the Warrants, and (ii) 553,360 shares of common stock.
(9) Address: 5660 Rush Road, Conover, Wisconsin 54519. Mary M. McCash is a partner of McCash Family Limited Partnership, which is a significant shareholder of the Company that owns more than 5% of the total outstanding shares of common stock of the Company. Mary M. McCash does not have the power to vote or dispose of the shares of the Company owned by McCash Family Limited Partnership.
(10) Address: N 3810 South Grand Oak Road, Iron Mountain, Michigan 49801. Michael J. McCash is a partner of McCash Family Limited Partnership, which is a significant shareholder of the Company that owns more than 5% of the total outstanding shares of common stock of the Company. Michael J. McCash does not have the power to vote or dispose of the shares of the Company owned by McCash Family Limited Partnership.
(11) Address: 13639 Bridle Trail Road, Draper, Utah 84020. Coleen A. Lowe is a partner of McCash Family Limited Partnership, which is a significant shareholder of the Company that owns more than 5% of the total outstanding shares of common stock of the Company. Coleen A. Lowe does not have the power to vote or dispose of the shares of the Company owned by McCash Family Limited Partnership.
(12) Address: W 4454 County Road 573, Kulcan, Michigan 49892. Corinne M. Poquette is a partner of McCash Family Limited Partnership, which is a significant shareholder of the Company that owns more than 5% of the total outstanding shares of common stock of the Company. Corinne M. Poquette does not have the power to vote or dispose of the shares of the Company owned by McCash Family Limited Partnership.
(13) Address: 716 Hillcrest Drive, Iron Mountain, Michigan 49801. David J. McCash is a partner of McCash Family Limited Partnership, which is a significant shareholder of the

Company that owns more than 5% of the total outstanding shares of common stock of the Company. David J. McCash does not have the power to vote or dispose of the shares of the Company owned by McCash Family Limited Partnership.

DESCRIPTION OF SECURITIES TO BE REGISTERED

The following description of our common stock, together with the additional information included in any applicable prospectus supplements, summarizes the material terms and provisions of these types of securities but is not complete. For the complete terms of our common stock, please refer to our certificate of incorporation, as amended, and bylaws that are incorporated by reference into the Registration Statement which includes this prospectus.

As of March 12, 2010, our authorized capital stock consists of 250,000,000 shares of common stock, par value $0.001 per share, and 1,000,000 shares of preferred stock, par value $0.001 per share. No share of preferred stock is outstanding as of the date of this prospectus.

Common Stock

Under our certificate of incorporation, as amended, we may issue up to 250,000,000 shares of common stock, par value $0.001 per share. As of March 12, 2010, we have 47,313,880 shares of common stock issued and outstanding. The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Subject to preferences that may be applicable to any outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by our Board of Directors out of funds legally available for that purpose. In the event of liquidation, dissolution or winding up of our company, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to the prior distribution rights of any outstanding preferred stock. The common stock has no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. The outstanding shares of common stock are fully paid and non-assessable.

Our common stock is listed on the Pink Sheets under the symbol “ACEL”. The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company.

PLAN OF DISTRIBUTION

We are registering shares of common stock to permit the resale of such common stock by the holders from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the Selling Security Holders of the securities. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The Selling Security Holders may sell all or a portion of the securities beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the securities are sold through underwriters or broker-dealers, the Selling Security Holders will be responsible for underwriting discounts or commissions or agent’s commissions. The securities may be sold in one or more transactions at prevailing market prices at the time of the sale on the over-the-counter bulletin board or at privately negotiated prices determined at the time of sale. These sales may be effected in transactions, which may involve crosses or block transactions,

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- pursuant to Rule 144 under the Securities Act;
- broker-dealers may agree with the Selling Security Holders to sell a specified number of such securities at a stipulated price per security;
- a combination of any such methods of sale; and

- any other method permitted pursuant to applicable law.

If the Selling Security Holders effect such transactions by selling the shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the Selling Security Holders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). The Selling Security Holders may loan or pledge securities to broker-dealers that in turn may sell such securities.

The Selling Security Holders may pledge or grant a security interest in some or all of the warrants or shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, as amended, amending, if necessary, the list of Selling Security Holders to include the pledgee, transferee or other successors in interest as Selling Security Holders under this prospectus. The Selling Security Holders also may transfer and donate the warrants or shares of common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

Any Selling Security Holder who is identified as broker-dealer participating in the distribution of the shares of common stock is an “underwriter” within the meaning of the 1933 Act for the purposes of this offering, unless such Selling Security Holder received the shares as compensation for investment banking services, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the 1933 Act. Any Selling Security Holder who is identified as an affiliate of a broker-dealer participating in the distribution of the shares of common stock is also an underwriter for the purposes of this offering, unless such Selling Security Holder purchased the shares in the ordinary course of business and at the time of purchase had no understanding directly or indirectly with any party to distribute the shares. At the time a particular offering of the securities is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of securities being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the Selling Security Holders and any discounts, commissions or concessions allowed or reallowed or paid to broker-dealers.

Under the securities laws of some states, the securities may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the warrants and shares of common stock may not be sold unless such warrants or shares of common stock have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

The Selling Security Holders may choose not to sell any or may choose to sell less than all of the shares of common stock registered pursuant to the Registration Statement, of which this prospectus forms a part.

The Selling Security Holders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, Regulation M of the 1934 Act, which may restrict certain activities of, and limit the timing of purchases and sales of any of the shares of common stock by the Selling Security Holders and any other person participating in a distribution of the shares. Furthermore, under Regulation M, persons engaged in a distribution of the shares are prohibited from simultaneously engaging in market making and certain other activities with respect to shares for a specified period of time prior to the commencement of such distributions subject to specified exceptions or exemptions. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

60

We will pay all expenses of the registration of the shares of common stock pursuant to the registration rights in the Investor Rights Agreement, estimated to be approximately $69,183.34 in total, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “blue sky” laws; provided, however, that a Selling Security Holder will pay all underwriting discounts and selling commissions, if any. We will indemnify the Selling Security Holders against liabilities, including some liabilities under the 1933 Act, in accordance with the Purchase Agreement, or the Selling Security Holders will be entitled to contribution. We may be indemnified by the Selling Security Holders against civil liabilities, including liabilities under the 1933 Act, that may arise from any written information furnished to us by the Selling Security Holder specifically for use in this prospectus, in accordance with the related Subscription Agreement, or we may be entitled to contribution.

Once sold under the Registration Statement, of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

LEGAL MATTERS

The validity of the securities to be sold pursuant to this prospectus will be passed upon by Goodwin Procter LLP, counsel to the Company.

EXPERTS

Our consolidated financial statements as of July 31, 2009 and 2008 and for each of the years in the three-year period ended July 31, 2009 and for the period from August 24, 1981 (the date of inception) to July 31, 2009 included herein have been audited by J.H. Cohn LLP, independent registered public accounting firm, as stated in their reports, which are included herein in reliance upon the report of such firm given upon their authority as experts in accounting and auditing. The report of J.H. Cohn LLP with respect to our financial statements from inception to July 31, 2009 is based on the reports of Armus Harrison & Co. and KPMG LLP (KPMG), for the period from inception to July 31, 2002. As discussed in the our Annual Report on Form 10-K for the year ended July 31, 2005, Armus Harrison & Co. ceased performing accounting and auditing services for us in 1993 and subsequently dissolved and ceased all operations.

Our statements of operations, stockholders’ equity (deficiency), and cash flows for the period from August 24, 1981 (the date of inception) to July 31, 2002, have been included herein and in the Registration Statement in reliance upon the report of KPMG, independent registered public accounting firm, and upon the authority of said firm as experts in accounting and auditing. The report of KPMG with respect to our financial statements from inception to July 31, 2002 is based on the report of Armus Harrison & Co., included herein, for the period from inception to July 31, 1992. Armus Harrison & Co. ceased performing accounting and auditing services for us in 1993 and subsequently dissolved and ceased all operations.

The report of KPMG covering the July 31, 2002 financial statements contains an explanatory paragraph that states that our recurring losses from operations, working capital deficit and limited liquid resources raise substantial doubt about our ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of that uncertainty.

We have agreed to indemnify and hold KPMG harmless against and from any and all legal costs and expenses incurred by KPMG in successful defense of any legal action or proceeding that arises as a result of KPMG’s consent to the inclusion herein of its audit report on the Company’s financial statements.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file reports and other information with the Securities and Exchange Commission, or SEC. This prospectus is part of the Registration Statement, but does not contain all of the information included in the Registration Statement or exhibits. You may read and copy the Registration Statement and these reports, proxy statements and other information at the SEC's Public Reference Room at 100F St., N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-033 for further information on the Public Reference Room. The SEC maintains an internet site at http://www.sec.gov that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including our company.

This prospectus does not contain all of the information set forth in the Registration Statement and the exhibits and schedules thereto. For further information with respect to us and the shares of stock offered under this prospectus, reference is made to the Registration Statement, including the exhibits and schedules thereto. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete and, where any such contract or document is an exhibit to the Registration Statement, each statement with respect to the contract or document is qualified in all respects by the provisions of the relevant exhibit, which is hereby incorporated by reference.

We make available free of charge on or through our internet website our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 as soon as reasonably practicable after we electronically file this material with, or furnish it to, the SEC. Our Internet address is www.alfacell.com. The information contained on our website is not incorporated by reference in this prospectus and should not be considered a part of the prospectus.

Alfacell Corporation

Index to Financial Statements

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Alfacell Corporation

We have audited the accompanying balance sheets of Alfacell Corporation (a development stage company) as of July 31, 2009 and 2008, and the related statements of operations, stockholders' equity (deficiency), and cash flows for each of the years in the three-year period ended July 31, 2009 and for the period from August 24, 1981 (date of inception) to July 31, 2009. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. The financial statements of Alfacell Corporation for the period from August 24, 1981 to July 31, 2002 were audited by other auditors whose reports dated November 4, 2002 and December 9, 1992, except for Note 18 which is as of July 19, 1993 and Note 3 which is as of October 28, 1993, expressed unqualified opinions on those statements with explanatory paragraphs relating to the Company's ability to continue as a going concern.

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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, and as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, based on our audits and, for the effect on the period from August 24, 1981 (date of inception) to July 31, 2009 of the amounts for the period from August 24, 1981 (date of inception) to July 31, 2002, on the reports of other auditors, the financial statements referred to above present fairly, in all material respects, the financial position of Alfacell Corporation as of July 31, 2009 and 2008, and the results of its operations and its cash flows for each of the years in the three-year period ended July 31, 2009 and for the period from August 24, 1981 (date of inception) to July 31, 2009 in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed on Note 2 to the financial statements, the Company has suffered recurring losses from operations and negative cash flows from operating activities that raise substantial doubt about its ability to continue as a going concern. Management's plans in regards to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ J.H. Cohn LLP
Roseland, New Jersey
November 13, 2009

Report Of Independent Registered Public Accounting Firm

The Stockholders and Board of Directors
Alfacell Corporation:

We have audited the statements of operations, stockholders' equity (deficiency), and cash flows for the period from August 24, 1981 (date of inception) to July 31, 2002 (not presented herein) of Alfacell Corporation (a development stage company). These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit. The financial statements of Alfacell Corporation for the period from August 24, 1981 to July 31, 1992 were audited by other auditors who have ceased operations and whose report dated December 9, 1992, except as to note 18 which is July 19, 1993 and note 3 which is October 28, 1993, expressed an unqualified opinion on those statements with an explanatory paragraph regarding the Company's ability to continue as a going concern.

We conducted our audit 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, based on our audit and, for the effect on the period from August 24, 1981 to July 31, 2002 of the amounts for the period from August 24, 1981 to July 31, 1992, on the report of other auditors who have ceased operations, the financial statements referred to above present fairly, in all material respects, the results of operations and cash flows for the period from August 24, 1981 to July 31, 2002 (not presented herein) of Alfacell Corporation in conformity with U.S. generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has suffered recurring losses from operations, has a working capital deficit and has limited liquid resources which raise substantial doubt about its ability to continue as a going concern. Management’s plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ KPMG LLP

Short Hills, New Jersey
November 4, 2002

On December 1, 1993, certain shareholders of Armus Harrison & Co. or AHC terminated their association with AHC, and AHC ceased performing accounting and auditing services, except for limited accounting services to be performed on behalf of the Company. In June 1996, AHC dissolved and ceased all operations. The report of AHC with respect to the financial statements of the Company from inception to July 31, 1992 is included herein, although AHC has not consented to the use of such report herein and will not be available to perform any subsequent review procedures with respect to such report. Accordingly, investors will be barred from asserting claims against AHC under Section 11 of the Securities Act of 1933, as amended, or Securities Act, on the basis of the use of such report in any registration statement of the Company into which such report is incorporated by reference. In addition, in the event any persons seek to assert a claim against AHC for false or misleading financial statements and disclosures in documents previously filed by the Company, such claim will be adversely affected and possibly barred. Furthermore, as a result of the lack of a consent from AHC to the use of its audit report herein, or, to its incorporation by reference into a registration statement or other filings, the officers and directors of the Company will be unable to rely on the authority of AHC as experts in auditing and accounting in the event any claim is brought against such persons under Section 11 of the Securities Act based on alleged false and misleading financial statements and disclosures attributable to AHC. The discussion regarding certain effects of the AHC termination is not meant and should not be construed in any way as legal advice to any party and any potential purchaser should consult with his, her or its own counsel with respect to the effect of the AHC termination on a potential investment in the Common Stock of the Company or otherwise.

Independent Auditors' Report

Board of Directors
Alfacell Corporation
Bloomfield, New Jersey

We have audited the balance sheets of Alfacell Corporation (a Development Stage Company) as of July 31, 1992 and 1991, as restated, and the related statements of operations, stockholders' deficiency, and cash flows for the three years ended July 31, 1992, as restated, and for the period from inception August 24, 1981 to July 31, 1992, as restated. In connection with our audit of the 1992 and 1991 financial statements, we have also audited the 1992, 1991 and 1990 financial statement schedules as listed in the accompanying index. These financial statements and financial statement schedules are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion the financial statements referred to above present fairly in all material respects, the financial position of Alfacell Corporation as of July 31, 1992 and 1991, as restated, and for the three years ended July 31, 1992, as restated, and for the period from inception August 24, 1981 to July 31, 1992, as restated, and the results of operations and cash flows for the years then ended in conformity with generally accepted accounting principles.

The accompanying financial statements have been prepared on a going concern basis which contemplates the realization of assets and the satisfaction of liability in the normal course of business. As shown in the statement of operations, the Company has incurred substantial losses in each year since its inception. In addition, the Company is a development stage company and its principal operation for production of income has not commenced. The Company's working capital has been reduced considerably by operating losses, and has a deficit net worth. These factors, among others, as discussed in Note 2 to the Notes of Financial Statements, indicates the uncertainties about the Company's ability to continue as a going concern. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts and the amount or classification of liabilities that might be necessary should the Company be unable to continue its existence.

/s/ Armus, Harrison & Co.
Armus, Harrison & Co.

Mountainside, New Jersey
December 9, 1992
Except as to Note 18 which
is July 19, 1993 and Note 3
which is October 28, 1993

ALFACELL CORPORATION

(A Development Stage Company)

Balance Sheets

July 31, 2009 and 2008

	2009	2008
ASSETS		
Current assets:		
Cash and cash equivalents	$129,194	$4,661,656
Prepaid expenses	54,494	165,259
Total current assets	183,688	4,826,915
Property and equipment, net of accumulated depreciation and amortization of $377,134 in 2009 and $342,031 in 2008	108,018	143,121
Other assets	266,280	350,000
Total assets	$557,986	$5,320,036
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY)		
Current liabilities:		
Accounts payable	$407,273	$1,252,478
Accrued clinical trial expenses	459,911	882,386
Accrued professional service fees	350,486	511,779
Accrued compensation expense	207,245	227,803
Current portion of obligations under capital lease	4,299	3,453
Other accrued expenses	2,890	4,135
Total current liabilities	1,432,104	2,882,034
Other liabilities:		
Accounts payable, net of current portion	444,223	–
Obligations under capital lease, net of current portion	12,641	16,940
Accrued retirement benefits	335,250	510,000
Deferred rent	284,134	267,668
Deferred revenue	5,200,000	5,200,000
Total other liabilities	6,276,248	5,994,608
Total liabilities	7,708,352	8,876,642
Commitments and Contingencies		
Stockholders' equity (deficiency):		
Preferred stock, $.001 par value. Authorized and unissued, 1,000,000 shares at July 31, 2009 and 2008	–	–
Common stock $.001 par value. Authorized 100,000,000 shares at July 31, 2009 and 2008; issued and outstanding 47,313,880 shares and 47,276,880 shares at July 31, 2009 and 2008, respectively	47,314	47,277

Capital in excess of par value	101,734,572	100,788,973
Deficit accumulated during development stage	(108,932,252)	(104,392,856)
Total stockholders' equity (deficiency)	(7,150,366)	(3,556,606)
Total liabilities and stockholders' equity (deficiency)	$557,986	$5,320,036

See accompanying notes to financial statements.

ALFACELL CORPORATION

(A Development Stage Company)

Statements of Operations

Years ended July 31, 2009, 2008 and 2007
and the Period from August 24, 1981
(Date of Inception) to July 31, 2009

	2009	2008	2007	August 24, 1981 (date of inception) to July 31, 2009
Sales	$ –	$ –	$ –	$ 553,489
Operating expenses:				
Cost of sales	–	–	–	336,495
Research and development	3,268,348	8,503,110	5,543,175	72,581,880
General and administrative	2,431,121	5,797,355	4,092,990	40,963,889
Total operating expenses	5,699,469	14,300,465	9,636,165	113,882,264
Loss from operations	(5,699,469)	(14,300,465)	(9,636,165)	(113,328,775)
Investment income	25,633	227,591	370,650	2,302,081
Other income	–	–	–	99,939
Interest expense:				
Related parties	–	–	–	(1,147,547)
Others	(5,427)	(3,607)	(96)	(2,883,206)
Loss before state tax benefit	(5,679,263)	(14,076,481)	(9,265,611)	(114,957,508)
State tax benefit	1,139,867	1,755,380	510,467	6,025,256
Net loss	$ (4,539,396)	$ (12,321,101)	$ (8,755,144)	$ (108,932,252)
Loss per basic and diluted common share	$ (0.10)	$ (0.26)	$ (0.19)	
Weighted average number of shares outstanding – basic and diluted	47,313,000	46,919,000	44,958,000	

See accompanying notes to financial statements.

ALFACELL CORPORATION

(A Development Stage Company)

Statement of Stockholders' Equity (Deficiency)

Period from August 24, 1981
(Date of Inception) to July 31, 2009

	Common Stock							
	Number of Shares	Amount	Capital In Excess of par Value	Common Stock to be Issued	Deficit Accumulated During Development Stage	Subscription Receivable	Deferred compensation, restricted stock	Total Stockholders' Equity (Deficiency)
Issuance of shares to officers and stockholders for equipment, research and development, and expense reimbursement	712,500	$713	$212,987	$—	$ —	$ —	$ —	$ 213,700
Issuance of shares for organizational legal service	50,000	50	4,950	—	—	—	—	5,000
Sale of shares for cash, net	82,143	82	108,418	—	—	—	—	108,500
Adjustment for 3 for 2 stock split declared September 8, 1982	422,321	422	(422)	—	—	—	—	—
Net loss	—	—	—	—	(121,486)	—	—	(121,486)
Balance at July 31, 1982	1,266,964	1,267	325,933	—	(121,486)	—	—	205,714
					—			
Issuance of shares for equipment	15,000	15	13,985	—	—	—	—	14,000
Sale of shares to private investors	44,196	44	41,206	—	—	—	—	41,250
Sale of shares in public offering, net	660,000	660	1,307,786	—	—	—	—	1,308,446
Issuance of shares under stock grant program	20,000	20	109,980	—	—	—	—	110,000
Exercise of warrants, net	1,165	1	3,494	—	—	—	—	3,495
Net loss	—	—	—	—	(558,694)	—	—	(558,694)
Balance at July 31, 1983	2,007,325	2,007	1,802,384	—	(680,180)	—	—	1,124,211
Exercise of warrants, net	287,566	287	933,696	—	—	—	—	933,983

Issuance of shares under stock grant program	19,750	20	101,199	—	—	—	—	101,219
Issuance of shares under stock bonus plan for directors and consultants	130,250	131	385,786	—	—	—	—	385,917
Net loss	—	—	—	—	(1,421,083)	—	—	(1,421,083)
Balance at July 31, 1984	2,444,891	2,445	3,223,065	—	(2,101,263)	—	—	1,124,247
Issuance of shares under stock grant program	48,332	48	478,057	—	—	—	—	478,105
Issuance of shares under stock bonus plan for directors and consultants	99,163	99	879,379	—	—	—	—	879,478
Shares canceled	(42,500)	(42)	(105,783)	—	—	—	—	(105,825)
Exercise of warrants, net	334,957	335	1,971,012		—	—	—	1,971,347
Net loss	—	—	—	—	(2,958,846)	—	—	(2,958,846)
Balance at July 31, 1985	2,884,843	2,885	6,445,730	—	(5,060,109)	—	—	1,388,506
Issuance of shares under stock grant program	11,250	12	107,020	—	—	—	—	107,032
Issuance of shares under stock bonus plan for directors and consultants	15,394	15	215,385	—	—	—	—	215,400
Exercise of warrants, net	21,565	21	80,977	—	—	—	—	80,998
Net loss	—	—	—	—	(2,138,605)	—	—	(2,138,605)
Balance at July 31, 1986 (carried forward)	2,933,052	2,933	6,849,112	—	(7,198,714)	—	—	(346,669)

ALFACELL CORPORATION

(A Development Stage Company)

Statement of Stockholders' Equity (Deficiency), Continued

	Common Stock							
	Number of Shares	Amount	Capital In Excess of par Value	Common Stock to be Issued	Deficit Accumulated During Development Stage	Subscription Receivable	Deferred compensation, restricted stock	Total Stockholders' Equity (Deficiency)
Balance at July 31, 1986 (brought forward)	2,933,052	$ 2,933	$ 6,849,112	$ —	$ (7,198,714)	$ —	$ —	$ (346,669)
Exercise of warrants, net	14,745	15	147,435	—	—	—	—	147,450
Issuance of shares under stock bonus plan for directors and consultants	5,000	5	74,995	—	—	—	—	75,000
Issuance of shares for services	250,000	250	499,750	—	—	—	—	500,000
Sale of shares to private investors, net	5,000	5	24,995	—	—	—	—	25,000
Net loss	—	—	—	—	(2,604,619)	—	—	(2,604,619)
Balance at July 31, 1987	3,207,797	3,208	7,596,287	—	(9,803,333)	—	—	(2,203,838)
Issuance of shares for legal and consulting services	206,429	207	724,280	—	—	—	—	724,487
Issuance of shares under employment incentive program	700,000	700	2,449,300	—	—	—	(2,450,000)	—
Issuance of shares under stock grant program	19,000	19	66,481	—	—	—	—	66,500
Exercise of options, net	170,000	170	509,830	—	—	—	—	510,000
Issuance of shares for litigation settlement	12,500	12	31,125	—	—	—	—	31,137
Exercise of warrants, net	63,925	64	451,341	—	—	—	—	451,405
	61,073	61	178,072	—	—	—	—	178,133

Sale of shares to private investors								
Amortization of deferred compensation, restricted stock	—	—	—	—	—	—	449,167	449,167
Net loss	—	—	—	—	(3,272,773)	—	—	(3,272,773)
Balance at July 31, 1988	4,440,724	4,441	12,006,716	—	(13,076,106)	—	(2,000,833)	(3,065,782)
				—				
Sale of shares for litigation settlement	135,000	135	1,074,703	—	—	—	—	1,074,838
Conversion of debentures, net	133,333	133	399,867	—	—	—	—	400,000
Sale of shares to private investors	105,840	106	419,894	—	—	—	—	420,000
Exercise of options, net	1,000	1	3,499	—	—	—	—	3,500
Issuance of shares under employment agreement	750,000	750	3,749,250	—	—	—	(3,750,000)	—
Issuance of shares under the 1989 Stock Plan	30,000	30	149,970	—	—	—	(150,000)	—
Amortization of deferred compensation, restricted stock	—	—	—	—	—	—	1,050,756	1,050,756
Net loss	—	—	—	—	(2,952,869)	—	—	(2,952,869)
Balance at July 31, 1989	5,595,897	5,596	17,803,899	—	(16,028,975)	—	(4,850,077)	(3,069,557)
Issuance of shares for legal and consulting services	52,463	52	258,725	—	—	—	—	258,777
Issuance of shares under the 1989 Stock Plan	56,000	56	335,944	—	—	—	(336,000)	—
Sale of shares for litigation settlement	50,000	50	351,067	—	—	—	—	351,117
Exercise of options at, net	105,989	106	345,856	—	—	—	—	345,962

ALFACELL CORPORATION

(A Development Stage Company)

Statement of Stockholders' Equity (Deficiency), Continued

	Common Stock							
	Number of Shares	Amount	Capital In Excess of par Value	Common Stock to be Issued	Deficit Accumulated During Development Stage	Subscription Receivable	Deferred compensation, restricted stock	Total Stockholders' Equity (Deficiency)
Sale of shares to private investors	89,480	$90	$354,990	$—	$—	$ —	$ —	$ 355,080
Issuance of shares under employment agreement	750,000	750	3,749,250	—	—	—	(3,750,000)	—
Conversion of debentures, net	100,000	100	499,900	—	—	—	—	500,000
Amortization of deferred compensation, restricted stock	—	—	—	—	—	—	3,015,561	3,015,561
Net loss	—	—	—	—	(4,860,116)	—	—	(4,860,116)
Balance at July 31, 1990	6,799,829	6,800	23,699,631	—	(20,889,091)	—	(5,920,516)	(3,103,176)
Exercise of options, net	16,720	16	108,664	—	—	—	—	108,680
Issuance of shares for legal consulting services	87,000	87	358,627	—	—	—	—	358,714
Issuance of shares under the 1989 Stock Plan	119,000	119	475,881	—	—	—	(476,000)	—
Amortization of deferred compensation, restricted stock	—	—	—	—	—	—	2,891,561	2,891,561
Net loss	—	—	—	—	(5,202,302)	—	—	(5,202,302)
Balance at July 31, 1991	7,022,549	7,022	24,642,803	—	(26,091,393)	—	(3,504,955)	(4,946,523)
Exercise of options at, net	1,000	1	3,499	—	—	—	—	3,500
Sale of shares to private investors	70,731	71	219,829	—	—	—	—	219,900
	94,000	94	469,906	—	—	—	—	470,000

Conversion of debentures, net								
Issuance of shares for services	45,734	46	156,944	—	—	—	—	156,990
Issuance of shares under the 1989 Stock Plan	104,000	104	285,896	—	—	—	(286,000)	—
Amortization of deferred compensation, restricted stock	—	—	—	—	—	—	3,046,726	3,046,726
Net loss	—	—	—	—	(4,772,826)	—	—	(4,772,826)
Balance at July 31, 1992	7,338,014	7,338	25,778,877	—	(30,864,219)	—	(744,229)	(5,822,233)
Sale of shares to private investors	352,667	353	735,147	—	—	—	—	735,500
Issuance of shares for legal services	49,600	50	132,180	—	—	—	—	132,230
Issuance of shares for services	5,000	5	9,995	—	—	—	(10,000)	—
Issuance of shares under the 1989 Stock Plan	117,000	117	233,883	—	—	—	(234,000)	—
Amortization of deferred compensation, restricted stock	—	—	—	—	—	—	664,729	664,729
Net loss	—	—	—	—	(2,357,350)	—	—	(2,357,350)
Balance at July 31, 1993	7,862,281	7,863	26,890,082	—	(33,221,569)	—	(323,500)	(6,647,124)
Conversion of debentures, net	425,400	425	1,701,575	—	—	—	—	1,702,000
Sale of shares to private investors, net	743,000	743	1,710,048	—	—	—	—	1,710,791
Conversion of short-term borrowings	72,800	73	181,927	—	—	—	—	182,000
Issuance of shares for services	16,200	16	43,334	—	—	—	—	43,350

ALFACELL CORPORATION
(A Development Stage Company)

Statement of Stockholders' Equity (Deficiency), Continued

	Common Stock							
	Number of Shares	Amount	Capital In Excess of par Value	Common Stock to be Issued	Deficit Accumulated During Development Stage	Subscription Receivable	Deferred compensation, restricted stock	Total Stockholders' Equity (Deficiency)
Issuance of shares under the 1989 Stock Plan, for services	5,000	$5	$14,995	$—	$—	$—	$—	$15,000
Issuance of options to related parties upon conversion of accrued interest, payroll and expenses	—	—	3,194,969	—	—	—	—	3,194,969
Repurchase of stock options from related party	—	—	(198,417)	—	—	—	—	(198,417)
Issuance of options upon conversion of accrued interest	—	—	142,441	—	—	—	—	142,441
Common stock to be issued	—	—	—	50,000	—	—	—	50,000
Amortization of deferred compensation, restricted stock	—	—	—	—	—	—	265,000	265,000
Net loss	—	—	—	—	(2,234,428)	—	—	(2,234,428)
Balance at July 31, 1994	9,124,681	9,125	33,680,954	50,000	(35,455,997)	—	(58,500)	(1,774,418)
Sale of shares to private investors, net	961,000	961	2,023,241	(50,000)	—	—	—	1,974,202
Conversion of short-term borrowings	17,600	17	43,983	—	—	—	—	44,000
Issuance of shares for services	30,906	31	77,234	—	—	—	—	77,265

Exercise of options, net	185,000	185	437,015	—	—	—	—	437,200
Common stock to be issued	—	—	—	339,008	—	—	—	339,008
Common stock to be issued, for services	—	—	—	4,800	—	—	—	4,800
Amortization of deferred compensation, restricted stock	—	—	—	—	—	—	58,500	58,500
Net loss	—	—	—	—	(1,993,123)	—	—	(1,993,123)
Balance at July 31, 1995	10,319,187	10,319	36,262,427	343,808	(37,449,120)	—	—	(832,566)
Sale of shares to private investors, net	2,953,327	2,953	8,969,655	(339,008)	—	—	—	8,633,600
Issuance of shares for services	19,995	20	70,858	(4,800)	—	—	—	66,078
Exercise of options, net	566,700	567	1,657,633	—	—	—	—	1,658,200
Sale of warrants	—	—	12,084	—	—	—	—	12,084
Issuance of options/warrants for services	—	—	50,872	—	—	—	—	50,872
Common stock to be issued	—	—	—	258,335	—	—	—	258,335
Subscription receivable	—	—	—	—	—	(254,185)	—	(254,185)
Net loss	—	—	—	—	(2,942,152)	—	—	(2,942,152)
Balance at July 31, 1996	13,859,209	13,859	47,023,529	258,335	(40,391,272)	(254,185)	—	6,650,266
Sale of shares to private investors, net	112,000	112	503,888	—	—	—	—	504,000
Issuance of options for services	—	—	76,504	—	—	—	—	76,504
Exercise of options, net	729,134	729	2,620,359	(258,335)	—	254,185	—	2,616,938
Exercise of warrants, net	147,450	148	737,102	—	—	—	—	737,250
Net loss	—	—	—	—	(5,018,867)	—	—	(5,018,867)
Balance at July 31, 1997 (carried forward)	14,847,793	14,848	50,961,382	—	(45,410,139)	—	—	5,566,091

F-11

ALFACELL CORPORATION
(A Development Stage Company)

Statement of Stockholders' Equity (Deficiency), Continued

	Common Stock							
	Number of Shares	Amount	Capital In Excess of par Value	Common Stock to be Issued	Deficit Accumulated During Development Stage	Subscription Receivable	Deferred compensation restricted stock	Total Stockholders' Equity (Deficiency)
Balance at July 31, 1997 (brought forward)	14,847,793	$14,848	$50,961,382	$—	$(45,410,139)	$ —	$ —	$ 5,566,091
Sale of shares to private investors, net	2,337,150	2,337	4,199,877	—	—	—	—	4,202,214
Issuance of options for services	—	—	199,954	—	—	—	—	199,954
Exercise of warrants, net	4,950	5	11,080	—	—	—	—	11,085
Issuance of shares for services, net	50,000	50	99,950	—	—	—	—	100,000
Net loss	—	—	—	—	(6,387,506)	—	—	(6,387,506)
Balance at July 31, 1998	17,239,893	17,240	55,472,243	—	(51,797,645)	—	—	3,691,838
Issuance of options for services	—	—	205,593	—	—	—	—	205,593
Issuance of shares for services, net	46,701	46	16,359	—	—	—	—	16,405
Net loss	—	—	—	—	(3,156,636)	—	—	(3,156,636)
Balance at July 31, 1999	17,286,594	17,286	55,694,195	—	(54,954,281)	—	—	757,200
Sale of shares to private investors, net	875,000	875	547,417	—	—	—	—	548,292
Exercise of options, net	95,000	95	45,755	—	—	—	—	45,850
Issuance of shares for services, net	174,965	175	92,009	—	—	—	—	92,184
	—	—	146,912	—	—	—	—	146,912

Vesting of options previously issued for services								
Net loss	—	—	—	—	(1,722,298)	—	—	(1,722,298)
Balance at July 31, 2000	18,431,559	18,431	56,526,288	—	(56,676,579)	—	—	(131,860)
Sale of shares to private investors, net	863,331	863	955,561	—	—	—	—	956,424
Exercise of options, net	165,555	166	83,565	—	—	—	—	83,731
Issuance of shares for services, net	11,800	12	10,018	—	—	—	—	10,030
Exercise of convertible debentures, net	330,000	330	296,670	—	—	—	—	297,000
Issuance of warrants with convertible debt	—	—	178,807	—	—	—	—	178,807
Issuance of options for services	—	—	160,426	—	—	—	—	160,426
Net loss	—	—	—	—	(2,294,936)	—	—	(2,294,936)
Balance at July 31, 2001	19,802,245	19,802	58,211,335	—	(58,971,515)	—	—	(740,378)
Sale of shares to private investors, net	2,622,122	2,623	1,047,925	—	—	—	—	1,050,548
Exercise of stock options and warrants	186,000	186	92,814	—	—	—	—	93,000
Issuance of shares for services, net	78,340	78	64,048	—	—	—	—	64,126
Exercise of convertible debentures, net	72,214	72	64,921	—	—	—	—	64,993
Vesting of options previously issued for services	—	—	173,436	—	—	—	—	173,436
Net loss	—	—	—	—	(2,591,162)	—	—	(2,591,162)
Balance at July 31, 2002 (carried forward)	22,760,921	22,761	59,654,479	—	(61,562,677)	—	—	(1,885,437)

ALFACELL CORPORATION
(A Development Stage Company)

Statement of Stockholders' Equity (Deficiency), Continued

	Common Stock							
	Number of Shares	Amount	Capital In Excess of par Value	Common Stock to be Issued	Deficit Accumulated During Development Stage	Subscription Receivable	Deferred compensation restricted stock	Total Stockholders' Equity (Deficiency)
Balance at July 31, 2002 (brought forward)	22,760,921	$22,761	$59,654,479	$—	$(61,562,677)	$ —	$ —	$ (1,885,437)
Sale of shares to private investors, net	1,315,000	1,315	652,312	—	—	—	—	653,627
Exercise of stock options and warrants	764,000	764	376,896	—	—	—	—	377,660
Issuance of shares for payment of accounts payable	186,208	186	94,037	—	—	—	—	94,223
Issuance of options for services rendered	—	—	75,521	—	—	—	—	75,521
Vesting of options previously issued for services	—	—	10,038	—	—	—	—	10,038
Issuance of warrants in connection with debt issuances	—	—	594,219	—	—	—	—	594,219
Net loss	—	—	—	—	(2,411,532)	—	—	(2,411,532)
Balance at July 31, 2003	25,026,129	25,026	61,457,502	—	(63,974,209)	—	—	(2,491,681)
Sale of shares to private investors, net	3,035,200	3,036	10,732,942	—	—	—	—	10,735,978
Exercise of stock options and warrants	3,100,160	3,100	4,155,397	—	—	—	—	4,158,497
Issuance of shares for payment of accounts payable	14,703	15	52,161	—	—	—	—	52,176
Issuance of shares for conversion of subordinated	3,042,817	3,043	924,829	—	—	—	—	927,872

debentures								
Issuance of shares for services rendered	128,876	128	288,372	—	—	—	—	288,500
Issuance of options for services rendered	—	—	280,612	—	—	—	—	280,612
Net loss	—	—	—	—	(5,070,307)	—	—	(5,070,307)
Balance at July 31, 2004	34,347,885	34,348	77,891,815	—	(69,044,516)	—	—	8,881,647
Exercise of stock options and warrants, net	438,372	438	306,717	—	—	—	—	307,155
Issuance of shares and warrants for conversion of subordinated debentures	1,744,978	1,745	462,754	—	—	—	—	464,499
Issuance of shares for services rendered	3,000	3	13,497	—	—	—	—	13,500
Issuance of options and warrants for services rendered	—	—	16,789	—	—	—	—	16,789
Net loss	—	—	—	—	(6,461,920)	—	—	(6,461,920)
Balance at July 31, 2005	36,534,235	36,534	78,691,572	—	(75,506,436)	—	—	3,221,670
Sale of shares to private investors, net	6,632,099	6,632	10,977,288	—	—	—	—	10,983,920
Exercise of stock options and warrants, net	1,122,827	1,123	1,347,201	—	—	—	—	1,348,324
Issuance of stock options and warrants for services rendered	—	—	1,489,264	—	—	—	—	1,489,264
Net loss	—	—	—	—	(7,810,175)	—	—	(7,810,175)
Balance at July 31, 2006 (carried forward)	44,289,161	44,289	92,505,325	—	(83,316,611)	—	—	9,233,003

ALFACELL CORPORATION
(A Development Stage Company)

Statement of Stockholders' Equity (Deficiency), Continued

	Common Stock							
	Number of Shares	Amount	Capital In Excess of par Value	Common Stock to be Issued	Deficit Accumulated During Development Stage	Subscription Receivable	Deferred compensation restricted stock	Total Stockholders' Equity (Deficiency)
Balance at July 31, 2006 (brought forward)	44,289,161	$44,289	$92,505,325	$—	$(83,316,611)	$ —	$ —	$9,233,003
Sale of shares to private investors, net	553,360	553	1,368,104	—	—	—	—	1,368,657
Exercise of stock options and warrants, net	1,438,359	1,439	1,504,261	—	—	—	—	1,505,700
Stock-based compensation expense	—	—	2,426,264	—	—	—	—	2,426,264
Net loss	—	—	—	—	(8,755,144)	—	—	(8,755,144)
Balance at July 31, 2007	46,280,880	46,281	97,803,954	—	(92,071,755)	—	—	5,778,480
Exercise of stock options and warrants, net	996,000	996	686,044	—	—	—	—	687,040
Stock-based compensation expense	—	—	2,298,975	—	—	—	—	2,298,975
Net loss	—	—	—	—	(12,321,101)	—	—	(12,321,101)
Balance at July 31, 2008	47,276,880	47,277	100,788,973	—	(104,392,856)	—	—	(3,556,606)
Exercise of stock options and warrants, net	37,000	37	13,183	—	—	—	—	13,220
Stock-based compensation expense	—	—	932,416	—	—	—	—	932,416
Net loss	—	—	—	—	(4,539,396)	—	—	(4,539,396)
Balance at July 31, 2009	47,313,880	$47,314	$101,734,572	$—	$(108,932,252)	$ —	$ —	$(7,150,366)

See accompanying notes to financial statements.

ALFACELL CORPORATION
(A Development Stage Company)

Statements of Cash Flows

Years ended July 31, 2009, 2008 and 2007
and the Period from August 24, 1981
(Date of Inception) to July 31, 2009

	2009	2008	2007	August 24, 1981 (date of inception) to July 31, 2009
Cash flows from operating activities:				
Net loss	$(4,539,396)	$(12,321,101)	$(8,755,144)	$(108,932,252)
Adjustments to reconcile net loss to net cash used in operating activities:				
Gain on sale of marketable equity securities	--	--	--	(25,963)
Depreciation and amortization	35,103	51,451	39,063	1,745,594
Loss on disposal of property and equipment	--	--	--	18,926
Loss on lease termination	--	--	30,964	30,964
Stock-based compensation expense	932,416	2,298,975	2,426,264	13,863,932
Amortization of deferred rent	16,466	155,549	14,155	186,170
Amortization of debt discount	--	--	--	594,219
Amortization of deferred compensation	--	--	--	11,442,000
Changes in assets and liabilities:				
Decrease (increase) in prepaid expenses	110,765	(15,052)	(83,117)	(114,361)
Decrease (increase) in loans receivable, related party	--	180,397	(9,527)	96,051
Decrease (increase) in other assets	83,720	35,000	(385,000)	(266,280)
Increase in loans and interest payable, related party	--	--	--	744,539
(Decrease) increase in accounts payable	(400,982)	819,692	(853,384)	1,358,131
Increase in accrued payroll and expenses, related parties	--	--	--	2,348,145
(Decrease) increase in accrued retirement benefits	(94,308)	612,000	--	517,692
(Decrease) increase in accrued expenses	(686,013)	126,988	89,859	1,556,973
Increase in deferred revenue	--	5,100,000	100,000	5,200,000
Net cash used in operating activities	(4,542,229)	(2,956,101)	(7,385,867)	(69,635,520)
Cash flows from investing activities:				
Purchase of marketable equity securities	--	--	--	(290,420)
Purchase of short-term investments	--	--	--	(1,993,644)
Proceeds from sale of marketable equity securities	--	--	--	316,383
Proceeds from sale of short-term investments	--	--	--	1,993,644
Capital expenditures	--	(34,070)	(38,858)	(1,605,066)
Patent costs	--	--	--	(97,841)
Net cash used in investing activities	--	(34,070)	(38,858)	(1,676,944)

F-15

ALFACELL CORPORATION
(A Development Stage Company)

Statements of Cash Flows, Continued

	2009	2008	2007	August 24, 1981 (date of inception) to July 31, 2009
Cash flows from financing activities:				
Proceeds from short-term borrowings	$ --	$ --	$ --	$874,500
Payment of short-term borrowings	--	--	--	(653,500)
Increase in loans payable, related party, net	--	--	--	2,628,868
Proceeds from bank debt and other long-term debt, net of deferred debt costs	--	--	--	3,667,460
Reduction of bank debt and long-term debt	--	--	--	(2,966,568)
Payment of capital lease obligation	(3,453)	(3,385)	--	(6,838)
Proceeds from issuance of common stock, net	--	--	1,368,657	53,102,893
Proceeds from exercise of stock options and warrants, net	13,220	687,040	1,505,700	14,080,850
Proceeds from issuance of convertible debentures, related party	--	--	--	297,000
Proceeds from issuance of convertible debentures, unrelated party	--	--	--	416,993
Net cash provided by financing activities	9,767	683,655	2,874,357	71,441,658
Net increase (decrease) in cash and cash equivalents	(4,532,462)	(2,306,516)	(4,550,368)	129,194
Cash and cash equivalents at beginning of period	4,661,656	6,968,172	11,518,540	--
Cash and cash equivalents at end of period	$129,194	$4,661,656	$6,968,172	$129,194
Supplemental disclosure of cash flow information – interest paid	$5,427	$3,607	$96	$1,723,260
Noncash investing and financing activities:				
Issuance of convertible subordinated debenture for loan payable to officer	$-	$-	$-	$2,725,000
Issuance of common stock upon the conversion of convertible subordinated debentures, related party	$-	$ -	$-	$3,242,000
Conversion of short-term borrowings to common stock	$-	$-	$-	$226,000
Conversion of accrued interest, payroll and expenses by related parties to stock options	$-	$ -	$-	$3,194,969
Repurchase of stock options from related party	$-	$ -	$-	$(198,417)
	$-	$-	$-	$142,441

Conversion of accrued interest to stock options				
Conversions of accounts payable to common stock	$-	$ -	$-	$506,725

ALFACELL CORPORATION
(A Development Stage Company)

Statements of Cash Flows, Continued

	2009	2008	2007	August 24, 1981 (date of inception) to July 31, 2009
Conversion of notes payable, bank and accrued interest to long-term debt	$-	$-	$-	$1,699,072
Conversion of loans and interest payable, related party and accrued payroll and expenses, related parties to long-term accrued payroll and other, related party	$ -	$ -	$ -	$1,863,514
Issuance of common stock and warrants upon the conversion of convertible subordinated debentures and accrued interest, other	$-	$-	$-	$1,584,364
Issuance of common stock for services rendered	$-	$-	$-	$2,460
Lease incentive allowance	$-	$-	$67,000	$67,000
Issuance of warrants with notes payable	$-	$-	$-	$594,219
Acquisition of equipment through capital lease obligation	$-	$23,778	$-	$23,778

See accompanying notes to financial statements.

Notes to Financial Statements

Years ended July 31, 2009, 2008 and 2007
and the Period From August 24, 1981
(Date of Inception) to July 31, 2009

(1) Summary of Significant Accounting Policies

Business Description

Alfacell Corporation (the "Company") was incorporated in Delaware on August 24, 1981 for the purpose of engaging in the discovery, investigation and development of a new class of anti-cancer drugs and anti-viral agents. The Company is a development stage company as defined in Statement of Financial Accounting Standards No. 7. The Company is devoting substantially all of its present efforts to establishing its business. Its planned principal operations have not commenced and, accordingly, no significant revenue has been derived therefrom.

The Company is engaged in the research, development, and commercialization of drugs for the treatment of various forms of cancer and other life threatening diseases. As of July 31, 2009, the Company is pursuing various available strategic alternatives to raise additional funds. The Company plans to continue the further development of its drug product candidates, which requires substantial capital for research, product development, and market development activities. The Company has not yet initiated marketing of a commercial drug product. Future product development will require clinical testing, regulatory approval, and substantial additional investment prior to commercialization. The future success of the Company is dependent on its ability to make progress in the development of its drug product candidates and, ultimately, upon its ability to attain future profitable operations through the successful manufacturing and marketing of those drug product candidates. There can be no assurance that the Company will be able to obtain the necessary financing or regulatory approvals to be able to successfully develop, manufacture, and market its products, or attain successful future operations. Accordingly, the Company's future success is uncertain.

In addition, uncertainty exists as to the Company's ability to protect its rights to patents and its proprietary information. There can also be no assurance that research and discoveries by others will not render some or all of the Company's technology or drug product candidates noncompetitive or obsolete. Nor can there be any assurance that unforeseen problems will not develop with the Company's technologies or applications, or that the Company will be able to address successfully technological challenges it encounters in its research and development programs. While the Company maintains insurance to cover the use of its drug product candidates in clinical trials, it does not maintain insurance covering the sale of its products nor is there any assurance that it will be able to obtain or maintain such insurance on acceptable terms or with adequate coverage against potential liabilities.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense during the reporting period. Actual results could differ from those estimates.

Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The carrying value of these investments approximates their fair market value due to their short maturity and liquidity. The Company maintains cash deposits with banks that at times exceed applicable insurance

limits.

Property and Equipment

Property and equipment is recorded at cost and is depreciated using the straight-line method over the estimated useful lives of the respective assets. Maintenance and repairs that do not extend the life of assets are charged to expense when incurred. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is included in operations for the period in which the transaction takes place. Total depreciation and amortization expense for the years ended July 31, 2009, 2008 and 2007, was $35,103, $51,451, and $39,063, respectively.

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate 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 an asset to estimated undiscounted cash flows expected to be generated by the asset. If the carrying amount exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount exceeds the fair value of the asset.

Other Assets

Other assets consist of the following:

	2009	2008
Lease security deposit held by a bank as collateral for a standby letter of credit in favor of the Company. The cash held by the bank is restricted as to use for the term of the standby letter of credit.	$ 266,280	$ 350,000

Income Taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Management provides valuation allowances against the deferred tax assets for amounts which are not considered “more likely than not” to be realized.

Revenue Recognition

The Company recognizes revenue in accordance with Staff Accounting Bulletin (“SAB”) No. 104, “Revenue Recognition” issued by the staff of the SEC. Under SAB No. 104, revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred and/or services have been rendered, the sales price is fixed or determinable, and collectibility is reasonably assured.

The Company enters into marketing and distribution agreements, which contain multiple deliverables. Under the provisions of Emerging Issues Task Force (“EITF”) No. 00-21, “Accounting for Revenue Arrangements with Multiple Deliverables”, the Company evaluates whether these deliverables constitute separate units of accounting to which total arrangement consideration is allocated. A deliverable qualifies as a separate unit of accounting when the item delivered to the customer has standalone value, there is objective and reliable evidence of fair value of items that have not been delivered to the customer, and, if there is a general right of return for the items delivered to the customer, delivery or performance of the undelivered items is considered probable and substantially in the control of the

Company. Arrangement consideration is allocated to units of accounting on a relative fair-value basis or the residual method if the Company is unable to determine the fair value of all deliverables in the arrangement. Consideration allocated to a unit of accounting is limited to the amount that is not contingent upon future performance by the Company. Upon determination of separate units of accounting and allocated consideration, the general criteria for revenue recognition are applied to each unit of accounting.

The Company has entered into an agreement with USP Pharma Spolka Z.O.O. (USP) to market, sell and distribute ONCONASE® in Poland and other countries in Eastern Europe. The Company received a $0.1 million upfront nonrefundable fee in July 2007 and is entitled to receive future additional fees, milestone payments and royalties. USP is responsible for all commercial costs in the territory. The Company has agreed to provide or arrange for contract manufacture of a commercial supply of ONCONASE® upon receipt of marketing approval in the territory. The up-front nonrefundable fee received by the Company will be recognized ratably as revenue once the general criteria for revenue recognition has been met for the unit of accounting to which the fee has been allocated.

In January 2008, the Company entered into a marketing and distribution agreement with BL&H Co. Ltd. for the commercialization of ONCONASE® in Korea, Taiwan and Hong Kong. Under the agreement, the Company received a $0.1 million up-front fee and are eligible to receive additional cash milestones and 50% of net sales in the territory. The Company will be responsible for the manufacture and supply of ONCONASE® to BL&H, while BL&H will be responsible for all activities and costs related to regulatory filings and commercial activities in the territory.

In January 2008, the Company entered into a U.S. License Agreement for ONCONASE® with Par Pharmaceutical, Inc. (“Par”). Under the terms of the License Agreement, Strativa Pharmaceuticals (“Strativa”), the proprietary products division of Par, received exclusive marketing, sales and distribution rights to ONCONASE® for the treatment of cancer in the United States and its territories. The Company retained all rights and obligations for product manufacturing, clinical development and obtaining regulatory approvals, as well as all rights for those non-U.S. jurisdictions in which the Company has not currently granted any such rights or obligations to third parties. The Company received a cash payment of $5 million upon the signing of the License Agreement and would have been entitled to additional development and sales milestone payments and double-digit royalties on net sales of ONCONASE®.

On September 8, 2009, the Company and Par entered into a Termination and Mutual Release Agreement (the “Termination Agreement”) pursuant to which the Company’s License Agreement and Supply Agreement with Par were terminated. The License Agreement was terminated and all rights under the license granted to Par revert back to the Company under the Termination Agreement. Under the Supply Agreement, the Company had agreed to supply all of Par’s requirements for ONCONASE®. Pursuant to the Termination Agreement, Par will be entitled to a royalty of 2% of net sales of ONCONASE® or any other ranpirnase product developed by the Company for use in the treatment of cancer in the United States and its territories commencing with the first sale of such product and terminating upon the later to occur of the 12th anniversary of the first sale and the date of expiration of the last valid claim of a pending application or issued patent owned or controlled by the Company with respect to such product.

Research and Development

Research and development costs are expensed as incurred. These costs include, among other things, consulting fees and costs related to the conduct of human clinical trials. The Company also allocates indirect costs, consisting primarily of operational costs for administering research and development activities, to research and development expenses.

Share-Based Compensation

In December 2004, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards (“SFAS”) No. 123(R) (revised 2004), “Share-Based Payment” (“SFAS 123(R)”), which amends SFAS 123. The new standard requires all share-based payments, including stock option grants to employees, to be recognized as an operating expense in the statement of operations. The expense is recognized over the requisite service period based on fair values measured on the date of grant. The Company adopted SFAS 123(R) effective August 1, 2005 using the modified prospective method and, accordingly, prior period amounts have not been restated. Under the modified prospective method, the fair value of all new stock options issued after July 31, 2005 and the unamortized fair value of

unvested outstanding stock options at August 1, 2005 are recognized as expense as services are rendered.

Accounting For Warrants Issued With Convertible Debt

The Company accounts for the intrinsic value of beneficial conversion rights arising from the issuance of convertible debt instruments with non-detachable conversion rights that are in-the-money at the commitment date pursuant to the consensuses of EITF Issue No. 98-5 and EITF Issue No. 00-27. Such value is allocated to additional paid–in capital and the resulting debt discount is charged to interest expense over the terms of the notes payable. Such value is determined after first allocating an appropriate portion of the proceeds received to warrants or any other detachable instruments included in the exchange.

Leases

With respect to its operating leases, the Company applies the provisions of FASB SFAS No. 13 “Accounting for Leases” and FASB Technical Bulletin (“FTB”) 88-1 “Issues Relating to Accounting for Leases”, recognizing rent expense on a straight-line basis over the lease term due to escalating lease payments and landlord incentives.

Contingencies

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated. Recoveries from other parties are recorded when realized.

Fair Value of Financial Instruments

Financial instruments consist primarily of cash and cash equivalents, accounts receivable, and accounts payable. The carrying value of these financial instruments approximates fair value due to the relative short term nature of these investments.

Recent Accounting Pronouncements

In June 2006, the FASB issued Interpretation No. 48, “Accounting for Uncertainty in Income Taxes - an Interpretation of FASB Statement No. 109” (“FIN 48”). FIN 48 clarifies the accounting for uncertainty in income taxes recognized in a company’s financial statements in accordance with Statement No. 109, “Accounting for Income Taxes.” FIN 48 prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a company’s tax return. The Company adopted FIN 48 and determined that it did not have a material impact on its reported financial results.

In February 2007, the FASB issued SFAS No. 159 “The Fair Value Option for Financial Assets and Financial Liabilities” (“SFAS 159”). SFAS 159 permits entities to choose to measure many financial instruments and certain other items at fair value that are not currently required to be measured at fair value. The Company adopted SFAS 159 as of August 1, 2008, and determined that it did not have a material impact on its reported financial results.

In June 2007, the FASB issued EITF Issue No. 07-03, “Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities,” (“EITF 07-03”). EITF 07-03 addresses the diversity that exists with respect to the accounting for the nonrefundable portion of a payment made by a research and development entity for future research and development activities. The EITF concluded that an entity must defer and capitalize nonrefundable advance payments made for research and development activities and expense these amounts as the related goods are delivered or the related services are performed. EITF 07-03 will be effective for interim or annual reporting periods in fiscal years beginning after December 15, 2007. The Company adopted EITF 07-03 as of August 1, 2008, and determined that it did not have a material impact on its reported financial results.

In December 2007, the FASB issued SFAS No. 141(R) "Business Combinations" (“SFAS 141(R)”). This Statement establishes principles and requirements for how the acquirer of a business recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed, and any noncontrolling interest in the acquiree. SFAS 141(R) also provides guidance for recognizing and measuring the goodwill acquired in the business combination and determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. The guidance will become effective as of the beginning of a company's fiscal year beginning after December 15, 2008. The Company believes that this new pronouncement will not have a material impact on its financial statements in future periods.

F-21

In September 2006, the FASB issued SFAS No. 157 "Fair Value Measurements" ("SFAS 157"). SFAS 157 defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. SFAS 157 does not require new fair value measurements. The Company adopted SFAS 157 as of August 1, 2008, and determined that it did not have a material impact on its reported financial results.

In February 2008, the FASB issued FASB Staff Position ("FSP") SFAS No. 157-1, "Application of FASB Statement No. 157 to SFAS Statement No. 13 and Other Accounting Pronouncements that Address Fair Value Measurements for Purposes of Lease Classification or Measurement under Statement 13", ("FSP 157-1"). FSP 157-1 amends SFAS 157 to exclude SFAS 13 and other accounting pronouncements that address fair value measurements for purposes of lease classifications under SFAS 13. However, this scope exception does not apply to assets acquired and liabilities assumed in a business combination that are required to be measured at fair value under FASB Statement No. 141, "Business Combinations", or SFAS 141(R), regardless of whether those assets and liabilities are related to leases. FSP 157-1 is effective upon initial adoption of SFAS 157. The Company adopted SFAS 157 as of August 1, 2008, and determined that it did not have a material impact on its reported financial results.

In February 2008, the FASB issued FSP SFAS No. 157-2, "Effective Date of FASB SFAS No. 157", ("FSP 157-2"). FSP 157-2 delays the effective date of SFAS 157 for non financial assets and non financial liabilities, except for items that are recognized or disclosed at fair value in the financial statements on a recurring basis at least annually. This delay is intended to allow the FASB and constituents additional time to consider the effect of various implementation issues that have arisen from the application of SFAS 157. The Company has reviewed FSP 157-2 and will wait to hear for additional positions taken by the FASB before proceeding further.

In October 2008 the FASB issued FSP SFAS No. 157-3, "Determining the Fair Value of a Financial Asset when the Market for that Asset is not Active" ("FSP 157-3"). FSP 157-3 clarifies the application of FASB No. 157 in a market that is not active and provides key considerations in determining the fair value of a financial asset when the market for that financial asset is not active. This FSP shall become effective upon issuance. The Company believes that this new pronouncement will not have a material impact on its financial statements in future periods.

In May 2008, the FASB issued SFAS No. 162 "Hierarchy of GAAP". This statement identifies the sources of accounting principles and the framework for selecting the principles to be used in the preparation of financial statements of nongovernmental entities that are presented in conformity with GAAP in the United States. This statement is effective 60 days following the SEC's approval of the Public Company Accounting Oversight Board amendments to AU Section 411, "The Meaning of Present Fairly in Conformity with GAAP". The Company adopted SFAS 162 in November 2008 and determined that it did not have a material impact on its reported financial results.

In June 2008, the FASB issued EITF No. 07-05 "Determining Whether an Instrument (or Embedded Feature) is Indexed to an Entity's Own Stock", ("EITF 07-05"). EITF 07-05 provides guidance for determining whether an equity-linked financial instrument (or embedded feature) is indexed to an entity's own stock, which would qualify as a scope exception under SFAS No 133, "Accounting for Derivative Instruments and Hedging Activities." EITF 07-05 is effective for fiscal years beginning after December 15, 2008 and early adoption for an existing instrument is not permitted. The Company does not expect that the adoption of EITF 07-05 will have a material impact on its financial statements.

In May 2009, the FASB issued SFAS No. 165, "Subsequent Events" ("SFAS 165"). SFAS 165 establishes standards for reporting events that occur after the balance sheet date, but before financial statements are issued or are available to be issued. It sets forth the period after the balance sheet date during which a reporting entity's management should evaluate events or transactions that may occur for potential recognition or disclosure in the financial statements; the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements and the disclosures an entity should make about events or transactions that occurred after the balance sheet date. This statement is effective for interim and annual periods ending after June 15, 2009 and will be

applied prospectively. The Company adopted the provisions of SFAS 165 for the fiscal year ended July 31, 2009 and determined that it did not have a material impact on its reported financial results. The Company evaluated all events or transactions that occurred after July 31, 2009 up through November 13, 2009, the date the Company issued these financial statements. Please see Note 13 - Subsequent Events for disclosures required by SFAS 165.

In June 2009, the FASB issued SFAS No. 168 "The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles - A Replacement of FASB Statement No. 162" ("SFAS 168"). SFAS 168 establishes the FASB Accounting Standards Codification ("Codification") as the single source of authoritative generally accepted accounting principles in the United States of America ("U.S. GAAP") recognized by the FASB to be applied by nongovernmental entities. Rules and interpretive releases of the SEC under authority of federal securities laws are also sources of authoritative U.S. GAAP for SEC registrants. SFAS 168 and the Codification are effective for financial statements issued for interim and annual periods ending after September 15, 2009. When effective, all non-SEC accounting and reporting standards will be superseded. All other non-grandfathered non-SEC accounting literature not included in the Codification will become non-authoritative. After SFAS 168, the FASB will not issue new standards in the form of Statements, FASB Staff Positions, or Emerging Issues Task Force Abstracts. Instead, the FASB will issue Accounting Standards Updates, which will serve only to: (a) update the Codification; (b) provide background information about the guidance; and (c) provide the bases for conclusions on the change(s) in the Codification. The Company does not expect that the adoption of SFAS 168 will have a material impact on its financial statements.

(2) Liquidity

The Company has reported net losses of $4,539,000, $12,321,000, and $8,755,000 and negative cash flows from operating activities of $4,542,000, $2,956,000 and $7,386,000 for the fiscal years ended July 31, 2009, 2008 and 2007, respectively. As of July 31, 2009, the Company had net working capital deficit of $1,248,000, and cash and cash equivalents of $129,000. The loss from date of inception, August 24, 1981, to July 31, 2009 amounts to $108,932,000. Until and unless the Company's operations generate significant revenues and cash flow, the Company will attempt to continue to fund operations from cash on hand and through the sources of capital described below. The Company's long-term continued operations will depend on its ability to raise additional funds through various potential sources such as equity and debt financing, convertible debentures, collaborative agreements, strategic alliances, sale of tax benefits, revenues from the commercial sale of ONCONASE®, licensing of its proprietary RNase technology and its ability to realize revenues from its technology and its drug candidates via out-licensing agreements with other companies. The Company is also pursuing available strategic alternatives which focuses on, but not be limited to, strategic partnership transactions, and could include a possible sale of the Company. Such additional funds and various alternatives may not become available as the Company may need them or be available on terms acceptable to the Company. Insufficient funds could require the Company to delay, scale back, or eliminate one or more of its research and development programs or to license third parties to commercialize drug product candidates or technologies that the Company would otherwise seek to develop without relinquishing its rights thereto. The Company expects that its cash balances as of July 31, 2009, after taking into consideration the cash infusion received in October 2009 (see Note 13 – Subsequent Events), will be sufficient to support its activities through July 2010, based on its reduced level of operations. There can be no assurance that the Company will be able to raise the capital it needs on terms which are acceptable, if at all. The Company may also obtain additional capital through the exercise of outstanding options and warrants and the sale of its tax benefit, although it cannot provide any assurance of such exercises or sale or the amount of capital it will receive, if any.

The Company's audited financial statements for the fiscal year ended July 31, 2009, were prepared under the assumption that the Company will continue its operations as a going concern. Continued operations are dependent on the Company's ability to raise various sources of capital described above. Such capital formation activities may not be available or may not be available on reasonable terms. The Company's financial statements do not include any adjustments that may result from the outcome of this uncertainty.

(3) Net Loss Per Common Share

The following table sets forth the computation of basic and diluted net loss per common share:

	Year Ended July 31,		
	2009	2008	2007
Numerator:			
Net loss	$ (4,539,396)	$ (12,321,101)	$ (8,755,144)
Denominator:			
Weighted average number of common shares outstanding	47,313,000	46,919,000	44,958,000
Loss per common share - basic and diluted	$ (0.10)	$ (0.26)	$ (0.19)

	Year Ended July 31,		
	2009	2008	2007
Potentially dilutive securities:			
Warrants	8,495,650	14,862,534	16,070,748
Stock options	4,771,650	6,353,067	4,867,039
Total potentially dilutive securities	13,267,300	21,215,601	20,937,787

As the Company has incurred a net loss for all periods presented, basic and diluted per common share amounts are the same, since the inclusion of all potentially dilutive securities would be anti-dilutive.

(4) Property and Equipment

Property and equipment, at cost, consists of the following at July 31:

	2009	2008
Laboratory equipment	$ 276,202	$ 276,202
Office equipment	118,172	118,172
Leasehold improvements	90,778	90,778
Less accumulated depreciation and amortization	(377,134)	(342,031)
Property and equipment, net	$ 108,018	$ 143,121

During the fiscal year ended July 31, 2007, the Company wrote off the following fully depreciated and unusable property and equipment:

	Amount	Accumulated Depreciation
Laboratory equipment	$ 505,869	$ 505,869
Office equipment	235,495	235,495
Leasehold improvements	97,833	97,833
Total	$ 839,197	$ 839,197

(5) Stockholders' Equity

On September 1, 1981, the Company issued 712,500 shares of common stock (1,068,750 shares adjusted for the stock split on September 8, 1982) to officers and stockholders in exchange for equipment, research and development services, stock registration costs, reimbursement of expenses and other miscellaneous services. The common stock issued for services was recorded at the estimated fair value of services rendered based upon the Board of Directors' determination and ratification of the value of services. Equipment received in exchange for common stock was recorded at the transferor's cost. Common stock issued for reimbursement of expenses was recorded based upon expenses incurred. All values assigned for expenses and services rendered were charged to operations except for stock registration costs, which were charged against proceeds.

On July 30, 1982, the Company sold 82,143 shares of common stock (123,214 shares adjusted to reflect the stock split on September 8, 1982) to a private investor at a price of $1.40 per share, resulting in net proceeds to the Company of approximately $108,500.

On September 8, 1982, the Company declared a 3-for-2 stock split. Shares previously issued by the Company were restated in accordance with the stock split.

On September 8, 1982, the Company issued 15,000 shares of common stock to an officer and stockholder in exchange for equipment. The equipment received in exchange for the common stock was recorded at the transferor's cost.

On November 1, 1982 and January 3, 1983, the Company sold 28,125 and 16,071 shares of common stock, respectively, to private investors at $.93 per share, resulting in net proceeds to the Company of approximately $41,250.

On January 17, 1983, the Company sold 660,000 shares of its common stock and 330,000 common stock purchase warrants in a public offering at a price of $2.50 per share, resulting in net proceeds to the Company of approximately $1,308,446. The warrants were to expire 12 months after issuance; however, the Company extended the expiration date to July 16, 1984. During the fiscal years ended July 31, 1983 and 1984, the net proceeds to the Company from the exercise of the warrants amounted to $934,000. Each common stock purchase warrant was not detachable from its common stock or exercisable until six months after the issuance date of January 17, 1983. Each warrant entitled the holder to purchase one share of common stock at an exercise price of $3.00 after six months and prior to nine months after issuance. The exercise price increased to $3.50 after nine months and prior to 12 months after issuance.

In connection with the public offering, the Company sold 60,000 five-year purchase warrants to the underwriters at a price of $.001 per warrant. Each warrant entitled the holder to purchase one share of common stock at an exercise price of $3.00. Pursuant to the antidilution provisions of the warrants, the underwriters received warrants to purchase 67,415 shares at an exercise price of $2.67 per share. By July 31, 1986, all such warrants were exercised and the Company received proceeds of approximately $180,000.

On February 22, 1984, the Company filed a registration statement with the Securities and Exchange Commission for the issuance of two series of new warrants, each to purchase an aggregate of 330,000 shares (hereinafter referred to as one-year warrants and two-year warrants). The one-year warrants had an exercise price of $6.50 per share and expired July 17, 1985. The two-year warrants had an exercise price of $10.00 per share and were to expire July 17, 1986. However, the Company extended the expiration date to August 31, 1987. The one-year warrants and two-year warrants were issued as of July 17, 1984 on a one-for-one basis to those public offering warrant holders who exercised their original warrants, with the right to oversubscribe to any of the warrants not exercised. During the fiscal years ended July 31, 1985, 1986, 1987 and 1988, the Company received net proceeds of approximately $2,471,000 as a result of the exercise of the warrants.

On January 2, 1987, the Company issued 250,000 shares of common stock to officers and stockholders, including the President and Chief Executive Officer, in recognition of services performed for the Company. The fair value of such shares was recorded as compensation expense.

On February 3, 1987, the Company sold 5,000 shares of common stock to a private investor for $5.00 per share, resulting in net proceeds to the Company of approximately $25,000.

On September 1, 1987, the Board of Directors approved new wage contracts for three officers. The contracts provided for the issuance of 700,000 shares of common stock as an inducement for signing. The fair value of these shares was recorded as deferred compensation and was amortized over the term of the employment agreements. The contracts also provided for the issuance of 1,500,000 shares of common stock in 750,000 increments upon the occurrence of certain events. These shares were issued during the fiscal years ended July 31, 1989 and 1990 and the fair value of such shares was recorded as deferred compensation and was amortized over the remaining term of the employment agreements. The contracts also provided for five-year options to purchase 750,000 shares of common stock at $3.00 per share; options for the purchase of 170,000 shares were exercised on June 16, 1988 and the remaining options for

the purchase of 580,000 shares expired on September 2, 1992.

During the fiscal year ended July 31, 1988, the Company issued 206,429 shares of common stock for payment of legal and consulting services. The Company also issued 12,500 shares of common stock in connection with the settlement of certain litigation. The fair value of such shares was charged to operations.

During the fiscal year ended July 31, 1988, the Company sold 61,073 shares of common stock to private investors at $2.92 per share resulting in net proceeds to the Company of approximately $178,133.

On September 21, 1988, the Company entered into a stipulation of settlement arising from a lawsuit wherein it agreed to pay a total of $250,000 in 12 monthly installments. Under the agreement, the Company authorized the issuance on September 7, 1988 and October 18, 1988 of 85,000 and 50,000 shares, respectively, to an escrow account to secure payment of the $250,000 due under the stipulation of settlement. During the fiscal year ended July 31, 1989, the Company issued and sold the 135,000 shares of common stock for $1,074,838. On February 14, 1989, the Board of Directors authorized the issuance of an additional 50,000 shares. During the year ended July 31, 1990, the shares were sold for $351,117. The proceeds from the above transactions were used to pay the settlement and related legal costs, reduce loans from and interest due to the Company's Chief Executive Officer, and for working capital.

During the fiscal year ended July 31, 1989, the Company sold 105,840 shares of common stock to private investors at $3.97 per share resulting in net proceeds to the Company of approximately $420,000.

During the fiscal year ended July 31, 1990, the Company issued 52,463 shares of common stock for payment of legal and consulting services and 50,000 shares of common stock in connection with the settlement of certain litigation. The fair value of the common stock was charged to operations.

During the fiscal year ended July 31, 1990, the Company sold 89,480 shares of common stock to private investors at $3.97 per share resulting in net proceeds to the Company of approximately $355,080.

During the fiscal year ended July 31, 1991, the Company issued 87,000 shares of common stock for payment of legal and consulting services. The fair value of the common stock was charged to operations.

During the fiscal year ended July 31, 1992, the Company sold 70,731 shares of common stock to private investors at $2.75 to $3.50 per share resulting in net proceeds to the Company of approximately $219,900.

During the fiscal year ended July 31, 1992, the Company issued 45,734 shares of common stock as payment for services rendered to the Company. The fair value of the common stock was charged to operations.

During the fiscal years ended July 31, 1992 and 1990, 94,000 and 50,000 shares of common stock, respectively, were issued to the Company's Chief Executive Officer upon the conversion of outstanding debentures.

During the fiscal year ended July 31, 1993, the Company sold 352,667 shares of common stock to private investors at prices ranging from $2.00 to $3.00 per share resulting in net proceeds to the Company of approximately $735,500. In addition, the private investors were granted options to purchase common stock totaling 587,167 shares at prices ranging from $3.00 to $7.00. During the fiscal years ended July 31, 1995 and 1996, 322,500 and 228,833 options expired, respectively. A total of 42,167 options due to expire on July 31, 1995 were extended to July 31, 1996 and their exercise price was reduced to $2.50. During the fiscal year ended July 31, 1996, 35,834 options were exercised resulting in net proceeds to the Company of approximately $89,600.

During the fiscal year ended July 31, 1993, the Company issued 54,600 shares of common stock as payment for legal and other services performed for the Company. The fair value of 49,600 shares was charged to operations. The remaining 5,000 shares were recorded as deferred compensation and were amortized over a one-year period, beginning in February 1993, in accordance with the agreement entered into with the recipient.

During the fiscal year ended July 31, 1994, the Company issued 7,000 shares of common stock as payment for services performed for the Company. The fair value of the common stock was charged to operations.

During the fiscal year ended July 31, 1994, the Company sold 25,000 shares of common stock to a private investor at $2.00 per share resulting in net proceeds to the Company of $50,000. In addition, the private investor was granted options to purchase common stock totaling 25,000 shares at $4.00 per common share. These options were exercised in September 1996 resulting in net proceeds to the Company of $100,000.

During the fiscal year ended July 31, 1994, the Company sold 800,000 shares of common stock to private investors at $2.50 per share resulting in net proceeds to the Company of $1,865,791. In addition, the private investors were granted warrants to purchase common stock totaling 800,000 shares at $5.00 per common share. Warrants for the purchase of 147,450 shares were exercised during fiscal 1997 resulting in net proceeds to the Company of $737,250. The remaining 652,550 warrants expired during fiscal 1997.

During the fiscal year ended July 31, 1994, 400,000 shares of common stock were issued to the Company's Chief Executive Officer upon the conversion of outstanding debentures.

During the fiscal year ended July 31, 1994, 25,400 shares of common stock were issued upon the conversion of other outstanding debentures.

In September 1994, the Company completed a private placement resulting in the issuance of 288,506 shares of common stock and three-year warrants to purchase 288,506 shares of common stock at an exercise price of $5.50 per share. The warrants expired during fiscal 1998. The common stock and warrants were sold in units consisting of 20,000 shares of common stock and warrants to purchase 20,000 shares of common stock. The price per unit was $50,000. The Company received proceeds of approximately $545,000, net of costs associated with the placement of approximately $55,000 and the conversion of certain debt by creditors of $121,265 into equivalent private placement units of 17,600 shares for conversion of short-term borrowings and 30,906 shares issued for services rendered. In October 1994, an additional two units at $50,000 per unit were sold to a private investor under the same terms as the September 1994 private placement resulting in the issuance of 40,000 shares of common stock and warrants to purchase 40,000 shares of common stock. The warrants expired during fiscal 1998.

During the fiscal year ended July 31, 1995, 185,000 shares of common stock were issued upon the exercise of stock options by unrelated parties, resulting in net proceeds to the Company of $437,200. The exercise prices of the options ranged from $2.27 to $2.50, which had been reduced from $3.50 and $5.00, respectively, during fiscal 1995.

During the fiscal year ended July 31, 1995, the Company sold 681,000 shares of common stock to private investors resulting in net proceeds to the Company of approximately $1,379,000. The shares were sold at prices ranging from $2.00 to $2.25.

During the fiscal year ended July 31, 1995, the Company sold 139,080 shares of common stock and 47,405 three-year warrants to purchase shares of common stock at an exercise price of $4.00 per share to private investors. The stock and warrants were sold at prices ranging from $2.25 to $2.73 per share and resulted in net proceeds to the Company of $343,808, of which $4,800 was for services rendered. The common shares were issued to the investors subsequent to July 31, 1995.

On August 4, 1995, the Company issued 6,060 shares of common stock as payment for services rendered to the Company. The fair value of the common stock was charged to operations.

On September 29, 1995, the Company completed a private placement resulting in the issuance of 1,925,616 shares of common stock and three-year warrants to purchase an aggregate of 55,945 shares of common stock at an exercise price of $4.00 per share. Of these shares 1,935 were issued for services rendered to the Company. The common stock was sold alone at per share prices ranging from $2.00 to $3.70, and in combination with warrants at per unit prices ranging from $4.96 to $10.92, which related to the number of warrants contained in the unit. The Company received proceeds of approximately $4.1 million, including $1,723,000 for approximately 820,000 shares received during the fiscal year ended July 31, 1995. The warrants expired in October 1998.

As consideration for the extension of the Company's term loan agreement with its bank, the Company granted the bank a warrant to purchase 10,000 shares of common stock at an exercise price of $4.19. The warrants were issued as

of October 1, 1995 and expired on August 31, 1997.

In June 1996, the Company sold in a private placement 1,515,330 shares of common stock and three-year warrants to purchase 313,800 shares of common stock at an exercise price of $7.50 per share. Of these shares, 12,000 were issued for services rendered to the Company. The common stock was sold alone at a per share price of $3.70, in combination with warrants at a per unit price of $12.52 and warrants were sold alone at a per warrant price of $1.42. Each unit consisted of three shares of common stock and one warrant. The Company received proceeds of approximately $5.7 million. The warrants expired during the fiscal year 2000.

In June 1996, the Company issued 10,000 five-year stock options as payment for services rendered. The options vested immediately and had an exercise price of $4.95 per share. The Company recorded research and development expense of $28,260, which was the fair value of the stock options on the date of issuance. The options expired during the fiscal year ended July 31, 2001.

During the fiscal year ended July 31, 1996, 207,316 shares of common stock were sold from October 1995 to April 1996 at per share prices ranging from $3.60 to $4.24 resulting in proceeds of approximately $808,000.

During the fiscal year ended July 31, 1996, 656,334 stock options were exercised by both related and unrelated parties resulting in net proceeds of approximately $1.9 million to the Company. Of these shares, 89,634 were issued subsequent to July 31, 1996. The exercise prices of the options ranged from $2.50 to $3.87 per share.

In August 1996, the Company issued 10,000 stock options with an exercise price of $4.69 per share exercisable for five years as payment for services to be rendered. An equal portion of these options vested monthly for one year commencing September 1, 1996. The Company recorded general and administrative expense of $27,900, which was the fair value of the stock options on the date of issuance. The options expired during the fiscal year ended July 31, 2002.

In March 1997, the Company issued 112,000 shares of common stock at $4.50 per share in a private placement to an investor resulting in net proceeds of $504,000 to the Company.

In May 1997, the Company issued 100,000 stock options to Dr. Stephen Carter, a director, with an exercise price of $5.20 per share as payment for serving as Chairman of the Scientific Advisory Board (the “SAB”). These options vested as follows: 10,000 vested immediately, 10,000 after one full calendar year, 10,000 annually for each of the following three years and 50,000 on May 13, 2002. The Company recorded a total research and development expense of $353,400, which was the fair value on the date of issuance of that portion of the stock options that had vested as of July 31, 2002. Of these options, 40,000 expired as of the fiscal year ended July 31, 2005.

During the fiscal year ended July 31, 1997, 639,500 stock options were exercised by both related and unrelated parties resulting in net proceeds of approximately $2.6 million to the Company. The exercise prices of the options ranged from $2.45 to $4.00 per share.

During the fiscal year ended July 31, 1997, 147,450 warrants were exercised by both related and unrelated parties resulting in net proceeds of approximately $737,250 to the Company. The exercise price of the warrants was $5.00 per share.

In October 1997, the Company issued 75,000 stock options to a director with an exercise price of $3.66 per share as payment for non-board related services to be rendered. These options vested as follows: 10,000 vested immediately; 10,000 after one full calendar year; 10,000 annually for each of the following three years; and 25,000 on October 31, 2002. A total general and administrative expense of $185,600 was amortized on a straight –line basis over a five-year period, which commenced in October 1997. Of these options, 30,000 expired as of the fiscal year ended July 31, 2005.

In October 1997, the Company issued 12,000 five-year stock options to a consultant with an exercise price of $3.91 per share as payment for services to be rendered. An equal portion of these options vested monthly and were amortized over a one-year period which commenced in October 1997. In May 1998, the Company terminated the services of the consultant, which resulted in the cancellation of 5,000 options. The Company recorded a total research and development expense for the remaining 7,000 options in the amount of $15,800, based upon the fair value of such options on the date of issuance, amortized on a straight-line basis over the vesting period of the grant. These options expired during the fiscal year ended July 31, 2003.

On December 9, 1997, the stockholders authorized the amendment of the Company's Certificate of Incorporation to increase the number of authorized shares of common stock, par value $.001 from 25,000,000 shares to 40,000,000 shares.

On December 9, 1997, the stockholders approved the 1997 Stock Option Plan (the "1997 Plan"). The total number of shares of common stock authorized for issuance upon exercise of options granted under the 1997 Plan was 2,000,000. Options are granted at fair market value on the date of the grant and generally are exercisable in 20% increments annually over five years starting one year after the date of grant and terminate five years from their initial exercise date.

On January 23, 1998, the SEC declared effective a registration statement on Form S-3 for the offer and sale by certain stockholders of up to 3,734,541 shares of common stock. Of these shares (i) an aggregate of 2,737,480 shares were issued to private placement investors in private placement transactions which were completed during the period from March 1994 through March 1997 (the "Earlier Private Placements"), (ii) an aggregate of 409,745 shares were issuable upon exercise of warrants which were issued to private placement investors in the Earlier Private Placements and (iii) an aggregate of 587,316 shares may be issued, or have been issued, upon exercise of options which were issued to option holders in certain other private transactions. As a result of the delisting of the Company's Common Stock from the Nasdaq SmallCap Market, the Company no longer qualified for the use of a Form S-3 registration statement for this offering when it filed its Annual Report on Form 10-K for the fiscal year ended July 31, 1999 and thus, this registration statement was no longer effective. The Company filed a registration statement on Form S-1 to register these shares, which was declared effective in February 2002.

In February 1998, the Company completed a Private Placement primarily to institutional investors, which resulted in the issuance of 1,168,575 units at a unit price of $4.00. Each unit consisted of two (2) shares of the Company's common stock, par value $.001 per share and one (1) three-year warrant to purchase one (1) share of common stock at an exercise price of $2.50 per share. The Company received net proceeds of approximately $4,202,000. The placement agent received warrants to purchase an additional 116,858 units comprised of the same securities sold to investors at an exercise price of $4.40 per unit as part of its compensation. In May 2001, the expiration date of these warrants was extended from May 19, 2001 to August 17, 2001. The warrants expired on August 17, 2001.

In March 1998, the Company converted an outstanding payable into 50,000 shares of the Company's Common Stock. The fair value of the Common Stock approximated the outstanding payable amount of $100,000.

In March 1998, the Company issued 75,000 stock options to a director with an exercise price of $2.80 per share as payment for non-board related services rendered. These options vested as follows: 10,000 vested immediately; 10,000 after one full calendar year; 10,000 annually for each of the following three years; and 25,000 on March 24, 2003. A total general and administrative expense of $138,100 was amortized on a straight-line basis over a five-year period, which commenced in March 1998. As of July 31, 2003, the expense was fully amortized and recorded, based upon the fair value of such 75,000 options on the date of issuance, amortized on a straight-line basis over the vesting period of the grant. Of these options, 10,000 expired during the fiscal year ended July 31, 2003 and 65,000 were exercised during the fiscal year ended July 31, 2004.

On April 20, 1998 the SEC declared effective a registration statement on Form S-3 for the offer and sale by certain stockholders of up to 3,918,299 shares of common stock. Of these shares (i) an aggregate of 2,337,150 shares of common stock were issued to the private placement investors in the February 1998 Private Placement, (ii) an aggregate of 1,168,575 shares may be issued upon exercise of the Warrants which were issued to the private placement investors in the February 1998 Private Placement, (iii) 350,574 shares may be issued upon the exercise of the Placement Agent Warrant which was issued to the placement agent in the February 1998 Private Placement and the Warrants issuable upon exercise of the Placement Agent Warrant, (iv) 50,000 shares of common stock were issued to a Supplier in connection with conversion of an outstanding accounts payable, and (v) 12,000 shares may be issued upon the exercise of options which were issued as payment for services to be rendered. As a result of the delisting of the Company's common stock from the Nasdaq SmallCap Market, the Company no longer qualified for the use of a Form S-3 registration statement for this offering when it filed its Annual Report on Form 10-K for the fiscal year ended July 31, 1999 and thus, this registration statement was no longer effective. The Company filed a registration

statement on Form S-1 to register these shares, which was declared effective in February 2002.

During the fiscal year ended July 31, 1998, the Company issued 833 three-year stock options as payment for services rendered in August 1997. The options vested thirty days from the issuance date and had an exercise price of $4.47 per share. The total general and administrative expense recorded for these options was $1,700, based upon the fair value of such options on the date of issuance. These options expired in August 2000.

During the fiscal year ended July 31, 1998, the Company issued 15,000 three-year stock options with an exercise price of $4.15 per share as payment for services. An equal portion of these options vested monthly and a total general and administrative expense of $30,000 was amortized over a one-year period which commenced September 1997. The Company also issued 5,000 three-year stock options with an exercise price of $4.15 per share as payment for services. Of these options, 833 vested monthly for five months commencing September 30, 1997 and 835 vested on the last day of the sixth month. Total general and administrative expense of $9,700 was amortized over a six-month period which commenced September 1997. As of July 31, 1998, the Company recorded general and administrative expense of $37,100, based upon the fair value of the 20,000 stock options on the date of the issuance, amortized on a straight-line basis over the vesting periods of the grants. These options expired three years after they vested.

During the fiscal year ended July 31, 1998, 4,950 shares of common stock were issued upon the exercise of warrants by unrelated parties, resulting in net proceeds of approximately $11,100 to the Company. The exercise prices of the warrants ranged from $2.20 to $2.50 per share.

On October 1, 1998 (the “Effective Date”), the Company entered into an agreement with a consultant (the “Agreement”), resulting in the issuance of 200,000 five-year stock options with an exercise price of $1.00 per share as payment for services to be rendered. These options vested as follows: an aggregate of 20,000 vested on October 1, 1999; an aggregate of 2,500 of such options vested on the last day of each month over the first twelve months after the Effective Date of the Agreement; the remaining 150,000 options vested on the third anniversary of the Effective Date of the Agreement. The Company recorded approximately $49,300 of general and administrative expense based upon the fair value of the vested options through July 31, 2000. During the fiscal year ended July 31, 2000, the Agreement was terminated which resulted in the cancellation of 150,000 options. The remaining 50,000 options were exercised during the fiscal year ended July 31, 2004, which resulted in gross proceeds of $50,000 to the Company.

During the fiscal year ended July 31, 1999, the Company issued 5,000 three-year stock options as payment for services rendered. The total general and administrative expense recorded for these options was $4,200, based upon the fair value of such options on the date of issuance. These options were exercised during the fiscal year ended July 31, 2000, which resulted in gross proceeds of $7,150 to the Company.

During the fiscal year ended July 31, 1999, the Company issued 40,701 shares of common stock for payment of legal services. The fair value of the common stock in the amount of $16,631 was charged to operations.

During the fiscal year ended July 31, 1999, the Company issued 6,000 shares of common stock for payment of services rendered. The fair value of the common stock in the amount of $2,460 was charged to operations.

During the fiscal year ended July 31, 2000, the Company issued 174,965 shares of common stock for payment of services rendered. The fair value of the common stock in the amount of $92,184 was charged to operations.

During the fiscal year ended July 31, 2000, the Company issued 95,000 shares of common stock upon the exercise of stock options by unrelated parties, which resulted in gross proceeds of $45,850 to the Company. The exercise prices of the options ranged from $0.43 to $1.43.

During the fiscal year ended July 31, 2000, the Company sold an aggregate of 875,000 shares of common stock to private investors at prices ranging from $0.50 to $1.00 per share resulting in net proceeds of $548,300 to the Company. In addition, the private investors were granted warrants to purchase an aggregate of 875,000 shares of common stock, inclusive of additional warrants issued so that all investors in the private placements received substantially the same securities, at per share exercise prices ranging from $1.03 to $4.55. These warrants expired in May 2003 and May 2005.

During the fiscal year ended July 31, 2001, the Company issued 11,800 shares of common stock for payment of services rendered. The fair value of the common stock in the amount of $10,030 was charged to operations.

During the fiscal year ended July 31, 2001, the Company sold an aggregate of 863,331 shares of common stock to private investors at prices ranging from $0.90 to $1.50 per share resulting in net proceeds of $956,000 to the Company. In addition, the private investors were granted warrants to purchase an aggregate of 696,665 shares of common stock at per share exercise prices ranging from $1.50 to $3.00. The warrants will expire during the period commencing July 2004 and ending in October 2006. Of these warrants, 418,887 expired and 277,778 were exercised.

During the fiscal year ended July 31, 2001, the Company issued 165,555 shares of common stock upon the exercise of stock options by related parties, which resulted in gross proceeds of $83,700 to the Company. The per share exercise prices of the options ranged from $0.29 to $0.85.

During the fiscal year ended July 31, 2001, the Company issued 50,000 five-year stock options to a director as payment for non-board related services. These options vested immediately and had an exercise price of $0.90 per share. The Company recorded general and administrative expense of $31,600, which was the fair market value of the options using the Black-Scholes options-pricing model on the date of issuance. These options were exercised during the fiscal year ended July 31, 2004.

During the fiscal year ended July 31, 2001, the Company issued 330,000 shares of common stock upon the conversion of convertible notes from related parties at $0.90 per share. In addition, upon conversion, the related parties were granted three-year warrants to purchase an aggregate of 330,000 shares of common stock at an exercise price of $2.50 per share. The estimated value of these warrants in the amount of $108,900 was recorded by the Company as interest expense during the fiscal year ended July 31, 2001. In October 2001, the board of directors approved a change of the 330,000 warrants from three-year warrants to five-year warrants and the exercise price from $2.50 per share to $1.50 per share to conform with private placements to unrelated parties. These warrants were exercised as of July 31, 2006.

During the fiscal year ended July 31, 2002, the Company issued 72,214 shares of common stock upon the conversion of convertible notes from unrelated parties at $0.90 per share. In addition, upon conversion, the unrelated parties were granted five-year warrants to purchase an aggregate of 72,214 shares of common stock at an exercise price of $1.50 per share. The estimated value of these warrants in the amount of $32,200 was recorded by the Company as interest expense during the fiscal year ended July 31, 2002. These options were exercised during the fiscals years ended July 31, 2007 and 2006.

During the fiscal year ended July 31, 2002, the Company issued 78,340 shares of common stock in settlement of accounts payable in the amount of $64,126. In addition, one of the vendors was granted five-year warrants to purchase 55,556 shares of common stock at an exercise price of $1.50 per share. The settled accounts payable amount was credited to equity as the value of the common stock and warrants.

During the fiscal year ended July 31, 2002, the Company issued an aggregate of 85,221 five-year stock options as payment for services rendered. The options vested immediately and had a per share exercise prices of $0.75 as to 70,000 stock options and $0.94 as to 15,221 stock options. The Company recorded an aggregate total of $40,747 non-cash expenses for these options, based upon the fair value on the date of the issuance as estimated by the Black-Scholes options-pricing model. These options were exercised as of July 31, 2005.

During the fiscal year ended July 31, 2002, the Company sold an aggregate of 2,622,122 shares of common stock to private investors at prices ranging from $0.35 to $0.90 per share resulting in net proceeds of $1,050,000 to the Company. In addition, the private investors were granted warrants to purchase an aggregate of 2,673,422 shares of common stock at per share exercise prices ranging from $0.75 to $1.50. The warrants will expire during the period commencing August 2006 and ending in September 2007. As of July 31, 2008, 1,733,638 of these warrants were exercised and 939,784 warrants expired.

During the fiscal year ended July 31, 2002, the Company issued warrants to purchase 1,500,000 shares of common stock to Roan Meyers Associates L.P. for an aggregate warrant purchase price of $1,500 in connection with the engagement of Roan Meyers to render advisory services. Of these warrants, 250,000 were exercisable at $.50 per share, 650,000 were exercisable at $1.00 per share and 600,000 were exercisable at $1.50 per share. In February 2002, the Company recorded an expense equal to the fair market value of the first 500,000 warrants which vested immediately, based upon the fair value of such warrants as estimated by Black-Scholes pricing model ($153,300), less the $1,500 received from the sale of the warrants. The remaining 1,000,000 warrants were to become exercisable if

Roan Meyers was successful in helping the Company raise capital. However, Roan Meyers was not successful in raising additional capital from a third party. During the fiscal year ended July 31, 2002, Roan Meyers exercised warrants to purchase an aggregate of 186,000 shares of common stock, at an exercise price of $0.50 per share, resulting in aggregate gross proceeds of $93,000 to the Company. During the fiscal year ended July 31, 2003, the vesting of the 600,000 warrants was amended to vest immediately and the exercise price was amended from $1.50 to $0.50 per share due to the price change of the Company's common stock. Roan Meyers exercised these warrants and was issued 600,000 shares of common stock. The Company also issued 40,000 shares of common stock upon the exercise of warrants by Roan Meyers at an exercise price of $.50 per share. The Company realized aggregate gross proceeds of $320,000 from these capital raising transactions. During the fiscal year ended July 31, 2004, the exercise price of 250,000 warrants was amended from $1.00 to $0.50 per share due to the price change of the Company's common stock and the vesting of the 400,000 warrants was amended to vest immediately. Roan Meyers exercised the remaining 674,000 warrants which resulted in the issuance of 674,000 shares of common stock by the Company. The Company realized gross proceeds of $537,000 in this capital raising transaction.

During the fiscal year ended July 31, 2002, the Company issued an aggregate of 75,000 five-year stock options to unrelated parties as an incentive for lending the Company an aggregate of $75,000, which was repaid during the quarter. The options vested immediately and have an exercise price of $1.50 per share. The total non-cash interest expense recorded for these options was $25,615, based upon the fair value of such option on the date of issuance as estimated by the Black-Scholes options-pricing model. Of these options, 25,000 were exercised and 50,000 expired.

During the fiscal year ended July 31, 2002, the Company issued a note payable to an unrelated party in an aggregate amount of $300,000. The note was due in thirty days bearing interest at 8% per annum. In addition, the lender received warrants to purchase 300,000 shares of common stock at an exercise price of $0.60 per share. The total non-cash interest expense recorded for these warrants was $40,690, based upon the fair value of such option on the date of issuance as estimated by the Black-Scholes options-pricing model. The notes were extended for eighteen months at a conversion price of $0.40 per share plus a five-year warrant for each share of the Company's common stock issued upon conversion at an exercise price of $1.00 per share. These notes were converted into shares of the Company's common stock and warrants in fiscal year 2004.

During the fiscal year ended July 31, 2003, the Company issued an aggregate of 764,000 shares of common stock upon the exercise of warrants and stock options by unrelated parties which resulted in gross proceeds of approximately $378,000 to the Company.

During the fiscal year ended July 31, 2003, the Company issued an aggregate 186,208 shares of common stock in settlement of accounts payable in the aggregate amount of $94,223. In addition, one of the vendors was granted five-year options to purchase 50,000 shares of common stock at an exercise price of $1.25 per share. The Company recorded $17,581 non-cash research and development expenses for these options, based upon the fair value on the date of the issuance as estimated by the Black-Scholes options-pricing model. The settled accounts payable amount was credited to equity as the value of the common stock and options.

During the fiscal year ended July 31, 2003, the Company issued 25,000 five-year stock options to an unrelated party as an incentive for lending the Company an aggregate of $25,000, which was fully paid as of April 30, 2003. The stock options vested immediately and have an exercise price of $0.23 per share. The total non-cash interest expense recorded for these stock options was $2,503. In addition, the Company issued 140,000 five-year stock options for services rendered. These stock options vested immediately and have exercise prices of $0.84 and $1.25 per share. The total non-cash charge relating to these options was $55,437. The total value of these options was based upon the fair value of such options on the date of issuance as estimated by the Black-Scholes options-pricing model. Of these options, 20,000 were exercised during the fiscal year ended July 31, 2004.

During the fiscal year ended July 31, 2003, the Company issued 8% convertible notes payable to unrelated parties with principal balances totaling an aggregate of $915,000. These notes payable were due to mature on various dates from April 2004 through May 2005 and were convertible into the Company's common stock at conversion prices ranging from $0.20 to $0.50 per share and an equal number of five year warrants with an exercise price of $1.00 per share. With the issuance of the notes payable, the Company issued to the unrelated parties five year warrants to purchase an aggregate of 665,000 shares of the Company's common stock, at an exercise price of $0.60 per share. In addition, the Company issued on the due date of the notes payable five year warrants to purchase an aggregate of 915,000 shares of the Company's common stock at per share exercise prices of $1.00 and $1.10. The Company valued these warrants at a total of $219,259 based on the fair value determined by using the Black-Scholes method relative to the fair value of the notes payable. At the issuance dates of the notes payable, the fair market values of the Company's shares exceeded the effective conversion prices. Accordingly, the Company initially increased additional paid-in capital by $219,259 for the relative fair value of the warrants and reduced the carrying value of the notes payable for the same amount for the debt discount attributable to the fair value of the warrants. The Company also increased its additional paid-in capital and debt discount by $374,960 for beneficial conversion rights issued in connection with the issuances of these notes.

During the fiscal year ended July 31, 2003, the Company sold an aggregate of 1,315,000 shares of common stock to private investors at prices ranging from $0.20 to $0.73 per share resulting in net proceeds of $653,627 to the Company. In addition, the private investors were granted warrants to purchase an aggregate of 1,315,000 shares of common stock at per share exercise prices ranging from $1.00 to $1.50. The warrants will expire during the period commencing January 2008 and ending in October 2008. As of July 31, 2008, 965,000 of these warrants were exercised and 150,000 expired.

On January 14, 2004, at the Company's annual meeting of stockholders, the Company's stockholders approved an amendment to the Company's Certificate of Incorporation, as amended, to increase the number of shares of common stock authorized from 40,000,000 to 100,000,000. Since no notes payable had been converted as of such date, the terms of the Company's notes payable relating to conversion and exercise which were amended to authorize conversion to Series A Preferred Stock because there were an insufficient number of authorized shares of common stock available for issuance upon conversion, reverted to their original terms so that they were again convertible into shares of common stock, rather than shares of Series A Preferred Stock.

On January 14, 2004, at the Company's annual meeting of stockholders, the Company's stockholders approved the 2004 Stock Incentive Plan (the "2004 Plan"). The total number of shares of common stock authorized for issuance under the 2004 Plan is 8,500,000.

During the fiscal year ended July 31, 2004, the Company issued an aggregate of 120,000 shares of common stock to private investors resulting in aggregate gross proceeds of $60,000 to the Company. In addition, the private investors were granted five-year warrants to purchase 120,000 shares of common stock at an exercise price of $1.25 per share.

During the fiscal year ended July 31, 2004, the Company issued 3,996 five-year stock options to a consultant as payment for services rendered. The options vested immediately and have a per share exercise price of $0.60. The Company recorded a total of $5,235 of non-cash expenses for these options, based upon the fair value on the date of the issuance as estimated by the Black-Scholes options pricing model. These options were exercised during the fiscal year ended July 31, 2004 resulting in gross proceeds of $2,398 to the Company.

During the fiscal year ended July 31, 2004, the Company entered into a two-part financing agreement with SF Capital Partners, Ltd. for the private placement of 1,704,546 shares of common stock and warrants to purchase 852,273 shares of common stock, at an exercise price of $1.50 per share. As consideration, the Company received $1,500,000. In addition, the Company granted SF Capital Partners, Ltd. a warrant to invest an additional $1,500,000 to purchase the Company's common stock at an exercise price based upon a 20-day trailing average of the closing price per share of the Company's common stock (the "Additional Warrants"). During the fiscal year ended July 31, 2004, SF Capital Partners, Ltd. exercised the Additional Warrants at a 20-day trailing average exercise price of $3.96 which resulted in gross proceeds of $1,500,000 and the issuance of 379,170 shares of common stock and an Exercise Warrant to purchase an additional 189,585 shares of common stock at a per share exercise price of $4.75. The Company also issued an aggregate of 53,876 shares of restricted common stock to a third party as finder's fee. During the fiscal year ended July 31, 2006, the exercise price of the Exercise Warrant to purchase an additional 189,585 shares of common stock was reduced from $4.75 to $2.88 per share. As of July 31, 2007, none of these options were exercised.

During the fiscal year ended July 31, 2004, the Company issued 25,000 five-year stock options to a board member as payment for non-board related services and 110,000 five-year stock options to various consultants for services rendered. The options vested immediately and have a per share exercise price of $3.46. The Company recorded a total of $275,377 non-cash expenses for these options, based upon the fair value on the date of the issuance as estimated by the Black-Scholes options pricing model. As of July 31, 2007, 5,000 of these options were exercised.

During the fiscal year ended July 31, 2004, the Company issued an aggregate of 14,703 restricted shares of common stock as payment of accounts payable in the amount of $52,176.

During the fiscal year ended July 31, 2004, the Company issued an aggregate of 75,000 restricted shares of common stock as payment for services rendered in an aggregate amount of $288,500.

During the fiscal year ended July 31, 2004, the Company issued 1,210,654 shares of common stock to an existing institutional investor, resulting in gross proceeds of $10,000,000 to the Company. In addition, the institutional investor was granted five-year warrants to purchase 1,210,654 shares of Common Stock at an exercise price of $12.39 per share. The Company paid a 5% finder's fee to a third party in connection with the private placement, which included a five-year warrant to purchase 60,533 shares of common stock at an exercise price of $12.39 per share. During the fiscal year ended July 31, 2006, the exercise price of the warrants to purchase an aggregate of 1,185,000 shares of common stock was reduced from $12.39 to $2.88 per share.

During the fiscal year ended July 31, 2004, the Company increased its outstanding shares by 40,000 shares of common stock for replacement of previously issued stock.

During the fiscal year ended July 31, 2004, the Company issued an aggregate of 3,042,817 shares of restricted common stock and five-year warrants to purchase 3,733,839 shares of common stock with exercise prices ranging from $1.00 to $1.10 per share upon the conversion of notes payable and accrued interest in the amount of approximately $927,872.

During the fiscal year ended July 31, 2004, the Company issued an aggregate of 2,676,994 shares of common stock upon the exercise of warrants by unrelated parties and stock options by unrelated parties, employees, a director and former director at per share exercise prices ranging from $0.26 to $4.74. The Company realized aggregate gross proceeds of $2,656,099 from these exercises.

During the fiscal year ended July 31, 2004, the Company incurred an aggregate of $824,022 of costs relating to various private placements.

During the fiscal year ended July 31, 2005, the Company issued an aggregate of 1,744,978 shares of common stock and five-year warrants to purchase an aggregate of 2,044,978 shares of common stock with an exercise price of $1.00 per share upon the conversion of notes payable and its accrued interest in an aggregate amount of $464,499.

During the fiscal year ended July 31, 2005, the Company issued an aggregate of 438,372 shares of common stock upon the exercise of stock options and warrants by unrelated parties, employees and a director at per share exercise prices ranging from $0.26 to $1.91. The Company realized aggregate net proceeds of $307,155 from these exercises.

During the fiscal year ended July 31, 2005, the Company issued 3,000 shares of restricted common stock as payment for services rendered. A non-cash expense of $13,500 was recorded by the Company for these shares, based upon the fair value of the common stock at the date of issuance.

During the fiscal year ended July 31, 2005, the Company issued 12,500 warrants to a vendor in consideration for services to be rendered. 5,000 of these warrants which vested immediately have an exercise price of $2.50 per share and 7,500 warrants which vested on the 91st day from the grant date have an exercise price of $3.50 per share. These warrants will expire 24 months from the date the registration statement registering the shares underlying the warrants is declared effective or 36 months from the date of grant, whichever comes first. These warrants expired during the fiscal year ended July 31, 2008. The Company recorded a total of $13,552 of non-cash expense for these warrants, based upon the fair value at July 31, 2005 as estimated by the Black-Scholes option pricing model.

During the fiscal year ended July 31, 2005, the Company issued an aggregate of 20,000 ten-year stock options to consultants as payment for continuing services. The options will vest 25% each year starting on the first anniversary of the commencement of the services of the consultants provided they remain as consultants on the relevant vesting

dates. The stock options have an exercise price of $2.05 per share. The Company recorded a total of $3,237 of non-cash expense for these options, based upon the fair value at July 31, 2005 as estimated by the Black-Scholes option pricing model. During the fiscal year ended July 31, 2006, the Company recorded under EITF 96-18, a total of $15,066 of non-cash expense for these options.

During the fiscal year ended July 31, 2006, the Company issued an aggregate of 1,122,827 shares of common stock upon the exercise of warrants and stock options by unrelated parties, consultants, employees, directors and an executive officer at per share exercise prices ranging from $0.26 to $3.46. The Company realized aggregate gross proceeds of $1,348,324 from these exercises.

During the fiscal year ended July 31, 2006, the Company issued 25,000 ten-year stock options to a consultant as payment for services rendered. The options vested immediately and have an exercise price of $1.32 per share. The Company recorded a total of $23,166 of non-cash expense for these options.

During the fiscal year ended July 31, 2006, the Company issued 25,000 ten-year stock options to a consultant as payment for services rendered. The options vested immediately and have an exercise price of $3.37 per share. The Company recorded a total of $58,387 of non-cash expense for these options.

During the fiscal year ended July 31, 2006, the Company issued 50,000 five-year stock options to a consultant as payment for services to be rendered. These options vest over a one year period, 50% of which vested immediately and 12.5% will vest equally for the next four quarters following the grant date. The stock options have an exercise price of $2.04 per share and are subject to variable accounting under EITF 96-18. The fair value of these options is being expensed over the service period. During the fiscal year ended July 31, 2006, the Company recorded a total of $74,253 of non-cash expense for these options.

During the fiscal year ended July 31, 2006, the Company issued 174,927 shares of restricted common stock to a private investor resulting in gross proceeds of $600,000 to the Company for a purchase price of $3.43 per share.

During the fiscal year ended July 31, 2006, the Company completed a private placement to various institutional investors which resulted in the issuance of an aggregate of 6,457,172 shares of restricted common stock for a purchase price of $1.75 per share. The institutional investors also received warrants to purchase up to an additional 6,457,172 shares of common stock of the Company. The fair value of the warrants at the grant date was approximately $12,962,000 as estimated using the Black-Scholes options pricing model. The warrants have a term of five years and were issued in two separate series. The first series of warrants (to purchase 3,228,590 shares of common stock) are exercisable beginning on January 19, 2007, and the second series of warrants (to purchase 3,228,582 shares of common stock) are also exercisable beginning on January 19, 2007. Both sets of warrants have an exercise price equal to $2.88 per share. If the Company enters into a strategic corporate collaboration as outlined in the second series of warrants by December 31, 2006, the second series of warrants will be cancelled upon notification by the Company to the holders of the warrants that it has entered into such an agreement prior to such date. The Company did not enter in such agreement by the specified time therefore, the second series of warrants were not canceled. The Company received net proceeds of approximately $10,384,000 from this private placement. The Company filed a registration statement on Form S-3 to register the resale of the shares and the shares issuable upon exercise of the warrants, which was declared effective in August 2006. If the Company had failed to file the registration statement, request effectiveness of the registration statement, respond to comments of the Securities and Exchange Commission, or cause the registration statement to be declared effective in a timely manner in accordance with the provisions of the registration rights agreement between the Company and the investors, or if the registration statement ceases to remain effective, or the investors are otherwise not permitted to utilize the prospectus in the registration statement to resell the securities for more than 15 consecutive calendar days or more than an aggregate of 25 calendar days during any 12-month period (which need not be consecutive calendar days), then the Company must pay to each investor an amount, in cash, as partial liquidated damages and not as a penalty, equal to 2% of the aggregate purchase price paid by such investor for any securities registered on the registration statement that are then held by such investor monthly until the failure is cured. However, the Company shall not be required to pay partial liquidated damages to the investor in excess of 10% of the purchase price such investor paid for the registered securities. If the Company fails to pay any partial liquidated damages in full within seven days after the date payable, the Company will pay interest thereon to the investor at a rate of 18% per annum (or such lesser maximum amount that is permitted to be paid by

applicable law), accruing daily from the date such partial liquidated damages are due until such amounts, plus all such interest thereon, are paid in full.

During the fiscal year ended July 31, 2007, the Company issued an aggregate of 295,800 shares of its common stock upon the exercise of stock options by an officer, employees and unrelated parties at per share exercise prices ranging from $0.23 to $2.16. The Company realized aggregate gross proceeds of $352,256 from these exercises.

During the fiscal year ended July 31, 2007, the Company issued an aggregate of 1,142,559 shares of its common stock upon the exercise of warrants by related and unrelated parties at per share exercise prices ranging from $0.60 to $2.88. The Company realized aggregate gross proceeds of $1,153,444 from these exercises.

During the fiscal year ended July 31, 2007, the Company issued an aggregate of 130,000 ten-year stock options to various consultants for services rendered. The options vested immediately and have an exercise price of $1.71 per share. The Company recorded the total fair value of $176,800 of non-cash expense for these options upon issuance.

During the fiscal year ended July 31, 2007, the Company issued 10,000 ten-year stock options to a consultant for serving in the Scientific Advisory Board. The options vested immediately and have an exercise price of $1.49 per share. The Company recorded the total fair value of $11,660 of non-cash expense for these options upon issuance.

In July 2007, the Company and USP Pharma Spolka Z.O.O. ("USP") entered into a Distribution and Marketing Agreement (the "Agreement"). The Agreement appoints USP as the Company's exclusive distributor in Poland, Lithuania, Estonia, Latvia, Belarus and the Ukraine in the field of Oncology. Included in the Agreement is an up-front fee as consideration for the appointment of USP as the Company's distributor in the defined territory. Based upon its review of SAB No. 101, "Revenue Recognition in Financial Statements", and SAB No. 104, "Revenue Recognition", the Company has determined that the up-front fee is to be recognized on a straight line basis over the term of the Agreement. The term of the Agreement is defined as the earlier of ten (10) years after the first commercial sale or the expiration of the patents covering the Company's product in the defined territory. The Agreement also includes multiple milestone payments and the payment of royalties. The milestone payments are to be paid to the Company upon the attainment of those milestones as defined in the Agreement. The royalty payments by USP to the Company are based on a fixed percentage of net sales. No revenue has been recognized for the up-front fee, milestone achievements and royalties in the accompanying financial statements. In connection with the Distribution Agreement, the Company and Unilab LP, an affiliate of US Pharmacia, entered into a Securities Purchase Agreement, (the "Purchase Agreement"), pursuant to which the Company issued an aggregate of 553,360 shares of its restricted common stock for purchase price of $2.53 per share. The Company realized gross proceeds of $1,400,000. The securities sold pursuant to the Purchase Agreement have not been registered under the Securities Act of 1933, as amended, and may not be offered or sold in the United States in the absence of an effective registration statement or exemption from registration requirements.

During the fiscal year ended July 31, 2008, the Company issued an aggregate of 760,000 shares of its common stock upon the exercise of warrants by unrelated parties at per share exercise prices ranging from $0.60 to $1.25. The Company realized aggregate gross proceeds of $541,500 from these exercises.

During the fiscal year ended July 31, 2008, the Company issued an aggregate of 236,000 shares of its common stock upon the exercise of stock options by an officer and employees at per share exercise prices ranging from $0.26 to $1.58. The Company realized aggregate gross proceeds of $145,540 from these exercises.

During the fiscal year ended July 31, 2008, the Company issued an aggregate of 265,000 stock options to the independent members of its board of directors with an exercise price of $1.72 per share and a six-year exercise term. The aggregate grant date fair market value of these options, $275,865, is being amortized over the one-year vesting period. The Company recognized an aggregate compensation expense of $154,705 and $121,160 for the fiscal years ended July 31, 2008 and 2009, respectively.

During the fiscal year ended July 31, 2008, the Company issued an aggregate of 40,000 stock options to various non-employee consultants for services rendered. The options vested immediately, have an exercise price of $1.75 per share and a ten-year exercise term. The aggregate grant date fair market value of these options, $52,840, was recognized as an expense by the Company during the fiscal year ended July 31, 2008.

During the fiscal year ended July 31, 2008, the Company issued an aggregate of 330,000 stock options to various non-employee consultants for serving as the Company's scientific advisors and research collaborators and for contributions made on behalf of the Company's pre-clinical and clinical research programs. Of these options, 110,000 vested immediately, 50% of the balance will vest after one year and the remaining 50% of the balance will vest after two years. The options have an exercise price of $1.75 per share and a ten-year term. Under the variable accounting provisions of EITF 96-18, the aggregate grant date fair market value of these options, $456,730, is being amortized over the vesting period and is being re-measured as of each reporting period. The aggregate re-measured fair market value of these options was estimated to be $189,872 and $174,153, for the fiscal years ended July 31, 2008 and 2009, respectively.

During the fiscal year ended July 31, 2008, the Company issued 250,000 stock options to its CEO, Kuslima Shogen, with an exercise price of $2.18 per share and a ten-year exercise term. The options, which were granted as a bonus for entering into an agreement for the marketing rights to ONCONASE® in the U.S., vested immediately and have a grant date fair market value of $405,000 which was recognized as an expense by the Company during the fiscal year ended July 31, 2008.

During the fiscal year ended July 31, 2008, the Company entered into a retirement agreement (see Note 12) with Kuslima Shogen, its CEO. Under the terms of the agreement, the Company issued 1,000,000 stock options with an exercise price of $2.00 per share. The options have a ten-year contractual term and will become exercisable only upon the approval of an ONCONASE® NDA by the United States Food and Drug Administration ("FDA") for the treatment of malignant mesothelioma. The grant date fair market value of these options, $1,900,000, is being amortized over the estimated vesting period. The Company recognized compensation expense of $429,762 and $619,762 for the fiscal years ended July 31, 2008 and 2009, respectively.

During the fiscal year ended July 31, 2009, the Company issued an aggregate of 37,000 shares of its common stock upon the exercise of stock options by various employees at per share exercise prices ranging from $0.26 to $0.54. The Company realized aggregate gross proceeds of $13,220 from these exercises.

During the fiscal year ended July 31, 2009, the Company issued an aggregate of 265,000 stock options to the independent members of its board of directors with an exercise price of $0.24 per share and a six-year exercise term. The aggregate grant date fair market value of these options, $42,400, is being amortized over the one-year vesting period. Of these options, 35,000 shares were forfeited as of July 31, 2009. The Company recognized an aggregate compensation expense of $21,128 for the fiscal year ended July 31, 2009.

(6) Common Stock Warrants

During the fiscal years 1988 and 1991, the Board of Directors granted stock purchase warrants to acquire a maximum of 400,000 shares of common stock at $5.00 per share which were not exercised and have since expired.

The following table summarizes the activity of common stock warrants issued in connection with the private placements and conversion of notes payable completed in fiscal years 1994 through 2006:

	Warrants	Exercise Price	Expiration
Sold in March 1994 Private Placement	800,000	$5.00	3/21/97 to 6/21/97
Outstanding at July 31, 1994	800,000	5.00	3/21/97 to 6/21/97
Sold in September 1994 Private Placement	288,506	5.50	12/9/97 to 12/14/97
Sold in October 1994 Private Placement	40,000	5.50	1/21/98
Sold in September 1995 Private Placement	47,405	4.00	10/1/98
Outstanding and exercisable at July 31, 1995	1,175,911	4.00 - 5.50	3/21/97 to 10/1/98
	10,000	4.19	

Issued to bank in connection with an amendment to the Company's term loan			8/31/97
Sold in September 1995 Private Placement	8,540	4.00	10/1/98
Sold in June 1996 Private Placement	313,800	7.50	8/29/99 to 9/10/99
Outstanding and exercisable at July 31, 1996	1,508,251	4.00 – 7.50	3/21/97 to 9/10/99

	Warrants	Exercise Price	Expiration
Exercised	(147,450)	5.00	3/21/97 to 6/21/97
Expired	(652,550)	5.00	3/21/97 to 6/21/97
Outstanding and exercisable at July 31, 1997	708,251	4.00 - 7.50	12/9/97 to 9/10/99
Sold in February 1998 Private Placement	1,168,575	2.50	8/17/01
Issued to the Placement Agent in connection with the February 1998 Private placement	350,574	2.20 – 2.50	8/17/01
Exercised	(4,950)	2.20 - 2.50	5/19/01
Expired	(338,506)	4.19 - 5.50	8/31/97 to 1/21/98
Outstanding and exercisable at July 31, 1998	1,883,944	2.20 - 7.50	10/1/98 to 8/17/01
Expired	(55,945)	4.00	10/1/98
Sold in February 2000 Private Placement	875,000	1.03 - 4.55	5/28/03 to 5/28/05
Expired	(313,800)	7.50	8/30/99 to 9/11/99
Outstanding and exercisable at July 31, 2000	2,389,199	1.03 - 4.55	5/19/01 to 5/28/05
Sold in various private placements	696,665	1.50 – 3.00	7/07/04 to 10/30/06
Issued to related parties upon conversion of note payable	330,000	1.50	7/07/06
Outstanding and exercisable at July 31, 2001	3,415,864	1.03 - 4.55	8/17/01 to 10/30/06
Expired	(1,514,199)	2.20 - 2.50	8/17/01
Sold in various private placements	2,673,422	0.75 - 1.50	11/03/06 to 9/10/07
Issued to vendor upon settlement of accounts payable	55,556	1.50	8/15/06
Issued to unrelated party for advisory services	1,500,000	0.50 - 1.50	2/6/07
Exercised	(186,000)	0.50	2/6/07
Issued to unrelated parties upon conversion of notes payable	72,214	1.50	10/31/06
Issued to unrelated parties in connection with notes payable	300,000	0.60	11/13/06 to 7/29/07
Outstanding and exercisable at July 31, 2002	6,316,857	0.50 - 4.55	5/28/03 to 9/10/07
Expired	(437,500)	1.03 - 3.25	5/28/03
Sold in various private placements	1,315,000	1.00 - 1.50	1/24/08 to 10/31/08
Exercised	(640,000)	0.50	2/6/07
Issued to unrelated parties in connection with notes payable	665,000	0.60	9/6/07 to 3/14/08
Outstanding and exercisable at July 31, 2003	7,219,357	0.50 - 4.55	5/28/05 to 10/31/08
Sold in various private placements	2,372,512	1.25 - 12.39	9/3/08 to 5/9/09
Exercised	(2,014,273)	0.50 – 1.50	2/6/07 to 10/31/08
Issued to third party as finder's fee	60,533	12.39	5/9/09
Issued to unrelated parties in connection with conversion of notes payable	3,733,839	1.00 - 1.10	12/4/08 to 7/15/09
Outstanding and exercisable at July 31, 2004	11,371,968	0.60 - 12.39	5/28/05 to 7/15/09
Exercised	(247,272)	0.75 – 1.25	7/16/07 to 8/5/08
Expired	(437,500)	2.50 – 4.55	5/28/05

	Warrants	Exercise Price	Expiration
Issued to unrelated parties in connection with conversion of notes payable	2,044,978	1.00	9/14/09 to 5/6/10
Issued to a vendor in connection with services rendered	12,500	2.50 – 3.50	4/25/08
Outstanding and exercisable at July 31, 2005	12,744,674	0.60 - 12.39	11/29/05 to 5/6/10
Exercised	(915,582)	0.75 – 1.50	7/7/06 to 9/2/08
Expired	(166,666)	3.00	11/29/05 – 12/21/05
Sold in a private placement	6,457,172	2.88	7/17/11
Outstanding at July 31, 2006	18,119,598	0.60 - 12.39	10/7/06 to 7/17/11
Exercised	(1,142,559)	0.60 – 2.88	10/7/06 to 7/17/11
Expired	(906,291)	1.50	10/12/06 – 4/9/07
Outstanding at July 31, 2007	16,070,748	0.60 - 12.39	9/6/07 to 7/17/11
Exercisable at July 31, 2007	16,070,748	0.60 - 12.39	9/6/07 to 7/17/11
Exercised	(760,000)	0.60 – 1.25	9/6/07 to 5/10/08
Expired	(448,214)	1.00 – 3.50	9/10/07 – 7/9/08
Outstanding at July 31, 2008	14,862,534	$1.00 - $12.39	8/13/08 to 7/17/11
Exercisable at July 31, 2008	14,862,534	$1.00 - $12.39	8/13/08 to 7/17/11
Expired	(6,366,884)	1.00 – 12.39	8/13/08 – 7/15/09
Outstanding at July 31, 2009	8,495,650	$1.00 - $2.88	9/14/09 to 7/17/11
Exercisable at July 31, 2009	8,495,650	$1.00 - $2.88	9/14/09 to 7/17/11

(7) Stock Options

2004 Stock Incentive Plan

The Company's stockholders approved the 2004 Stock Incentive Plan (the “2004 Plan”) for the issuance of up to 8,500,000 shares, which provides that common stock and stock options may be granted to employees, directors and consultants. The 2004 Plan provides for the granting of stock options, stock appreciation rights, restricted shares, or other share based awards to eligible employees and directors, as defined in the 2004 Plan. Options granted under the 2004 Plan will have an exercise price equal to the market value of the Company’s common stock on the date of the grant. The term, vesting period and time and method of exercise of options granted under the 2004 Plan are fixed by the Board of Directors or a committee thereof.

1997 Stock Option Plan

The Company’s stockholders approved the 1997 stock option plan for the issuance of options for up to 2,000,000 shares, which provides that options may be granted to employees, directors and consultants. Options are granted at market value on the date of the grant and generally are exercisable in 20% increments annually over five years starting one year after the date of grant and terminate five years from their initial exercise date. This plan expired in May 2007 except to the extent there are outstanding options.

1993 Stock Option Plan

The Company's stockholders approved the 1993 stock option plan for the issuance of options for up to 3,000,000 shares, which provides that options may be granted to employees, directors and consultants. Options are granted at market value on the date of the grant and generally are exercisable in 20% increments annually over five years starting one year after the date of grant and terminate five years from their initial exercise date. This plan expired in

November 2003 except to the extent there are outstanding options. As of July 31, 1994, 1,703,159 options were granted and outstanding under the 1993 stock option plan.

The Company recorded the following stock-based compensation expense for employees under SFAS 123(R) based on the fair value of stock options.

	Year Ended July 31,		
	2009	2008	2007
Research and development	$ 364,149	$ 717,059	$ 794,262
General and administrative	585,159	1,346,820	1,427,859
Total stock-based compensation expense	$ 949,308	$ 2,063,879	$ 2,222,121
Basic and diluted loss per common share	$ 0.02	$ .04	$ 0.05

At July 31, 2008, the Company reversed a total of $1,225,112 compensation expense related to 1,072,489 performance stock options issued to employees in May 2007. The Company assessed that the performance condition tied to these stock options is deemed improbable; therefore, no compensation expense should be recognized in accordance to the guidance of SFAS123R.

The fair value of the stock options at the grant date was estimated using the Black-Scholes option pricing model based on the weighted-average assumptions as noted in the following table. The risk-free interest rate for periods approximating the expected life of the option is based on the U.S. Treasury yield curve in effect at the time of grant. The expected stock price volatility is based on historical volatility of the Company's stock price. For post July 31, 2005 grants, the expected term until exercise is derived using the "simplified" method as allowed under the provisions of the SEC's SAB No. 110, "Disclosures about Fair Value of Financial Instruments" and represents the period of time that options granted are expected to be outstanding.

	2009	2008	2007
Expected dividend yield	0 %	0 %	0 %
Risk-free interest rate	1.00 %	3.45 %	4.78 %
Expected volatility	102.13 %	108.2 %	107.7 %
Expected term (years)	3.5	7.53	5.36
Weighted average fair value of options at grant date	$ 0.16	$ 1.64	$ 1.46
Weighted average fair value exercise price	$ 0.16	$ 1.94	$ 1.80

As of July 31, 2009, there was approximately $882,000 of total unrecognized compensation expense related to unvested options granted to employees that is expected to be recognized over a weighted average period of 2.33 years.

Shares, warrants and options issued to non-employees for services are accounted for in accordance with SFAS 123(R) and EITF Issue No. 96-18, "Accounting for Equity Instruments that are Issued to Other Than Employees for Acquiring or In Conjunction with Selling Goods or Services" ("EITF 96-18"). The fair value of such securities is recorded as an expense and additional paid-in capital in stockholders' equity over the applicable service periods using variable accounting through the vesting date based on the fair value of the securities at the end of each period or the vesting date. During the fiscal year ended July 31, 2009, under the variable accounting provisions of EITF 96-18, the Company reduced an aggregate total of $16,892 of non-cash expense for options issued to non-employees.

Option Activity

The following table summarizes stock option activity for the period August 1, 1994 to July 31, 2009:

	Shares Available for Grant	Options Outstanding	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Balance August 1, 1994	1,926,841	5,935,337	$3.76		
Granted	(818,850)	818,850	2.60		
Exercised	--	(185,000)	2.36		
Canceled/Expired	--	(1,897,500)	4.30		
Balance August 1, 1995	1,107,991	4,671,687	3.39		
Granted	(296,205)	296,205	3.99		
Exercised	--	(656,334)	2.92		
Canceled/Expired	6,500	(235,333)	4.89		
Balance July 31, 1996	818,286	4,076,225	3.43		
Authorized by 1997 Plan	2,000,000	--	-		
Granted	(932,500)	932,500	4.90		
Exercised	--	(639,500)	3.82		

Canceled/Expired	484,845	(484,845)	4.70
Balance July 31, 1997	2,370,631	3,884,380	3.56
Granted	(234,333)	234,333	3.31
Canceled/Expired	91,100	(91,100)	3.81
Balance July 31, 1998	2,227,398	4,027,613	3.54

	Shares Available for	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term	Aggregate Intrinsic Value
Granted	(595,000)	595,000	0.62		
Canceled/Expired	443,934	(555,737)	3.97		
Balance July 31, 1999	2,076,332	4,066,876	3.05		
Granted	(827,000)	827,000	0.52		
Exercised	--	(95,000)	0.48		
Canceled/Expired	638,395	(1,031,880)	2.73		
Balance July 31, 2000	1,887,727	3,766,996	2.65		
Granted	(447,000)	447,000	0.85		
Exercised	--	(165,555)	0.51		
Canceled/Expired	774,315	(1,018,557)	3.42		
Balance July 31, 2001	2,215,042	3,029,884	2.24		
Granted	(544,221)	544,221	0.69		
Canceled/Expired	655,840	(900,081)	2.31		
Balance July 31, 2002	2,326,661	2,674,024	1.90		
Granted	(630,000)	630,000	0.50		
Exercised	--	(124,000)	0.47		
Canceled/Expired	485,118	(736,358)	3.09		
Balance July 31, 2003	2,181,779	2,443,666	1.26		
Authorized by 2004 Stock Incentive Plan	8,500,000	--	-		
Granted	(1,388,996)	1,388,996	5.03		
Exercised	--	(666,717)	0.98		
Canceled/Expired	(262,783)	(208,500)	3.20		
Balance July 31, 2004	9,030,000	2,957,445	2.95		
Granted	(1,073,000)	1,073,000	4.36		
Exercised	--	(191,100)	0.75		
Canceled/Expired	290,500	(341,500)	4.57		
Balance July 31, 2005	8,247,500	3,497,845	3.35		
Granted	(745,000)	745,000	1.76		
Exercised	--	(207,245)	0.90		
Canceled/Expired	171,250	(205,250)	4.67		
Balance July 31, 2006	7,673,750	3,830,350	3.10		
Granted	(2,187,489)	2,187,489	1.80		
Exercised	--	(295,800)	1.19		332,936
Cancelled/Expired	(26,250)	(125,000)	3.07		
Forfeited	325,000	(730,000)	1.69		
Balance July 31, 2007	5,785,011	4,867,039	2.85	6.28	2,277,048
Granted	(1,885,000)	1,885,000	1.94		
Exercised	--	(236,000)	0.62		392,430
Cancelled/Expired	1,000	(137,000)	1.45		
Forfeited	25,972	(25,972)	2.00		

Balance July 31, 2008	3,926,983	6,353,067	$2.69	6.72	$84,115
Granted	(265,000)	265,000	0.24		
Exercised	--	(37,000)	0.36		8,126
Cancelled/Expired	1,058,005	(1,512,905)	2.74		
Forfeited	292,512	(296,512)	1.42		
Balance July 31, 2009	5,012,500	4,771,650	$2.64	3.84	$12,230
Exercisable at July 31, 2007		2,616,333	$3.25	4.22	$1,627,756
Exercisable at July 31, 2008		3,326,816	$3.33	4.88	$84,115
Exercisable at July 31, 2009		3,415,650	$3.02	2.14	$3,030

Stock option activity prior to adoption of SFAS 123 (see Note 1) is as follows:

1981 Non-Qualified Stock Option Plan

In 1981, the Board of Directors adopted a non-qualified stock option plan and had reserved 300,000 shares for issuance to key employees or consultants. Options were nontransferable and expired if not exercised within five years. Option grants of 60,000 shares expired unexercised by July 31, 1991.

Non-Qualified Stock Options

The Board of Directors issued non-qualified stock options which were not part of the 1981 non-qualified stock option plan or the 1989 Stock Plan as follows:

	Shares	Price Range
Granted	1,782,000	$ 3.00-3.87
Exercised	(276,989)	3.00-3.50
Canceled	(106,000)	3.00-3.50
Expired	(649,011)	3.00-3.50
Granted pursuant to conversion of certain liabilities:		
Related party	1,324,014	3.20
Unrelated party	73,804	3.20
Repurchased stock options	(102,807)	3.20
Balance at July 31, 1994	2,045,011	$ 3.20-3.87

In connection with certain private placements, the Board of Directors had included in the agreements, options to purchase additional shares of the Company's common stock as follows:

	Shares	Price Range
Granted (42,167 options were repriced and extended)	894,887	$ 2.50-7.00
Exercised	(81,000)	3.97-6.50
Expired	(201,720)	3.97-6.50
Balance at July 31, 1994	612,167	$ 2.50-7.00

All of the above options expired as of July 31, 2001.

1989 Stock Plan

On February 14, 1989, the Company adopted the Alfacell Corporation 1989 Stock Plan (the "1989 Stock Plan"), pursuant to which the Board of Directors could issue awards, options and grants.

No more options are being granted pursuant to this plan. The per share option exercise price was determined by the Board of Directors. All options and shares issued upon exercise were nontransferable and forfeitable in the event employment was terminated within two years of the date of hire. In the event the option was exercised and said shares were forfeited, the Company would return to the optionee the lesser of the current market value of the securities or the exercise price paid.

The stock option activity is as follows:

	Shares	Price Range
Granted, February 14, 1989	3,460,000	$ 3.50-5.00

Options issued in connection with share purchase	36,365		2.75
Expired	(1,911,365)		2.75-5.00
Canceled	(10,000)		5.00
Balance at July 31, 1994	1,575,000	$	3.50-5.00

(8) Stock Grant and Compensation Plans

The Company had adopted a stock grant program effective September 1, 1981, and pursuant to said program, had reserved 375,000 shares of its common stock for issuance to key employees. The stock grant program was superseded by the 1989 Stock Plan, and no further grants will be given pursuant to the grant plan. The following stock transactions occurred under the Company's stock grant program:

Year ended July 31,	Shares	Fair Value	Amount of Compensation
1983	20,000	$ 5.50	$ 110,000
1984	19,750	5.125	101,219
1985	48,332	5.125-15.00	478,105
1986	11,250	5.125-15.00	107,032
1988	19,000	3.50	6,500

On January 26, 1984, the Company adopted a stock bonus plan for directors and consultants. The plan was amended on October 6, 1986 to reserve 500,000 shares for issuance under the plan and to clarify a requirement that stock issued under the Plan could not be transferred until three years after the date of the grant. The stock bonus plan for directors and consultants was superseded by the 1989 Stock Plan and no further grants will be given pursuant to the stock bonus plan for directors and consultants. The following stock transactions occurred under the Company's stock bonus plan:

Year ended July 31,	Shares	Fair Value	Amount of Compensation
1984	130,250	$ 2.50-3.88	$ 385,917
1985	99,163	3.50-15.00	879,478
1985	(42,500)	2.50	(105,825)*
1986	15,394	9.65-15.00	215,400
1987	5,000	15.00	75,000

* Shares granted in 1984 were renegotiated in 1985 and canceled as a result of the recipient's termination.

1989 Stock Plan

Under the 1989 Stock Plan, one million shares of the Company's common stock were reserved for issuance as awards to employees. The 1989 Stock Plan also provided for the granting of options to purchase common stock of the Company. In addition, the 1989 Stock Plan provided for the issuance of 1,000,000 shares of the Company's common stock as grants. To be eligible for a grant, grantees must have made substantial contributions and shown loyal dedication to the Company.

Awards and grants were authorized under the 1989 Stock Plan during the following fiscal years:

Year ended July 31,	Shares	Fair Value	Amount of Compensation
1989	30,000	$ 5.00	$ 150,000
1990	56,000	6.00	336,000
1991	119,000	4.00	476,000
1992	104,000	2.75	286,000

1993	117,000	2.00	234,000
1994	5,000	3.00	15,000

Compensation expense was recorded for the fair value of all stock awards and grants over the vesting period. The 1994 stock award was immediately vested. There were no stock awards in fiscal year ended 1999 and the plan expired in 1999.

(9) Income Taxes

The Company accounts for income taxes under the provisions of SFAS 109. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement carrying amounts and tax bases of assets and liabilities using enacted tax rates in effect for all years in which the temporary differences are expected to reverse.

New Jersey has enacted legislation permitting certain corporations located in New Jersey to sell a portion of its state tax loss carryforwards and state research and development credits in order to obtain state tax benefits. For the state fiscal year 2009 (July 1, 2008 to June 30, 2009), the Company had approximately $1,274,000 of total available state tax benefit that was saleable. On December 1, 2008, the Company received approximately $1,140,000 from the sale of its total available state tax benefit, which was recognized as state tax benefit in the fiscal year ended July 31, 2009.

For the state fiscal year 2008 (July 1, 2007 to June 30, 2008), the Company had approximately $2,496,000 of total available state tax benefits that were saleable, of which New Jersey permitted the Company to sell approximately $1,969,000. In December 2007, the Company received approximately $1,755,000 from the sale of the $1,969,000 of state tax benefits, which was recognized as a state tax benefit for the fiscal year ended July 31, 2008.

For the state fiscal year 2007 (July 1, 2006 to June 30, 2007), the Company had approximately $2,338,000 of total available state tax benefits that were saleable, of which New Jersey permitted the Company to sell approximately $574,000. In December 2006, the Company received approximately $510,000 from the sale of the $574,000 of state tax benefits, which was recognized as a state tax benefit for the fiscal year ended July 31, 2007.

If still available under New Jersey law, the Company will attempt to qualify and sell its new state tax benefit between July 1, 2008 and June 30, 2009 (state fiscal year 2009) in the amount of approximately $722,000. This amount represents the net losses and research and development credits during the state fiscal year 2009. The Company cannot estimate, however, what percentage of its saleable state tax benefit New Jersey will permit it to sell, how much money will be received in connection with the sale, if any, if the Company will be able to qualify and find a buyer for its state tax benefit or if such funds will be available in a timely manner.

At July 31, 2009 and 2008, the tax effects of temporary differences that give rise to the deferred tax assets are as follows:

Deferred tax assets:	2009	2008
Excess of book over tax depreciation and amortization	$ (2,867)	$ 4,581
Stock options	2,628,892	2,350,272
Deferred revenue	2,080,000	2,080,000
Temporary differences	479,020	521,403
Federal and state net operating loss carryforwards	23,641,138 *	23,033,058 *
Research and experimentation credit carryforwards	2,578,601 *	3,067,618 *
Total gross deferred tax assets	31,404,784	31,056,932
Valuation allowance	(31,404,784)	(31,056,932)
Net deferred tax assets	$ —	$ —

* Net of amount sold pursuant to New Jersey state tax legislation.

A valuation allowance is provided when it is more likely than not that some portion or all of the deferred tax assets will not be realized. The tax benefit assumed using the federal statutory tax rate of 34% has been reduced to the actual benefits reflected on the statements of operations due principally to the aforementioned valuation allowance. In 2009, 2008 and 2007 the valuation allowance increased by $348,000, $3,877,000, and $3,074,000, respectively.

At July 31, 2009, the Company has federal net operating loss carryforwards of approximately $67,955,000 that expire in the years 2010 to 2029 (approximately $18,927,000 expires in the years 2010 to 2014) and state net operating loss carryforwards of approximately $8,942,000 that expire in years 2017 to 2018. The Company also has federal research and experimentation tax credit carryforwards of approximately $2,217,000 that expire in the years 2010 to 2029 (approximately $490,000 expires in the years 2010 to 2014) and state research and experimentation tax credits of approximately $361,000 that expire in the years 2023 to 2024. Ultimate utilization/availability of such net operating losses and credits is dependent upon the Company's ability to generate taxable income in future periods and may be significantly curtailed if a significant change in ownership occurs in accordance with the provisions of the Tax Reform Act of 1986.

Effective August 1, 2007, the Company adopted FIN 48 which clarifies the accounting and disclosure for uncertainty in income taxes. The adoption of this interpretation did not have any material impact on the Company's financial statements, as there were no unrecognized tax benefits as of August 1, 2007 or during the fiscal year ended July 31, 2009 and 2008.

The Company files income tax returns in the U.S. federal jurisdiction and New Jersey. For federal income tax purposes, fiscal 2006 through 2009 tax years generally remain open for examination by the tax authorities under the normal three-year statute of limitations. For New Jersey tax purposes, fiscal 2005 through 2009 tax years generally remain open for examination under a four-year statute of limitations.

(10) Related Party Transactions

In March 2008 and September 2008, the Company engaged Champions Biotechnology, Inc. to provide certain services for approximately $12,300 and $81,200, respectively. The Company's non-executive Chairman of the Board of Directors, Dr. David Sidransky, is also the chairman of the board of directors as well as a principal stockholder of Champions Biotechnology, Inc. As of July 31, 2009, the agreed amount was paid in full.

On October 19, 2009, Charles Muniz, the Company's President, Chief Executive Officer and Chief Financial Officer, was a party to the Securities Purchase Agreement, the Investor Rights Agreement, the Security Agreement and the Escrow Agreement. The Company's entry into an employment agreement with Mr. Muniz upon terms reasonably acceptable to the investors in the Offering was a condition to the Closing. See Note 13 – Subsequent Events.

(11) Commitments

Employment and Retirement Agreements

On April 28, 2008, the Company entered into a retirement agreement (the "Retirement Agreement") with Ms. Shogen. Under the terms of the Retirement Agreement, Ms. Shogen will be entitled to receive her current annual salary of $300,000 and participate in all benefit plans available for the Company's executives through her retirement date, which will occur on or before March 31, 2009 (the "Termination Date"). Ms. Shogen will receive retirement payments of $300,000 for each of the two years after the Termination Date. During the fiscal year ended July 31, 2008, the Company accrued these benefits in the amount of $612,000.

On September 14, 2009, the Company entered into an amendment (the "Amendment") to the Retirement Agreement amending certain terms. Pursuant to the Amendment, effective as of September 14, 2009, periodic payments owed to Ms. Shogen under the Retirement Agreement during the two year period commencing April 1, 2008 will be paid at the rate of $150,000 per year, rather than at the rate of $300,000 per year as originally provided in the Retirement Agreement. Under the Retirement Agreement, Ms. Shogen was entitled to receive continuing payments equal to 15% of any royalties received by Alfacell pursuant to any and all license agreements entered into by Alfacell for the marketing and distribution of Licensed Products. Under the Amendment, the amount of such royalties related to net sales of Licensed Products to be received by Ms. Shogen has been reduced to 5%. Under the Retirement Agreement, Ms. Shogen was entitled to receive continuing payments equal to 5% of net sales of Licensed Products booked by Alfacell on its financial statements. Under the Amendment the amount of such net sales booked by Alfacell has been reduced to 2%. Under the Amendment, in the event Alfacell obtains marketing approval for ONCONASE® from the Food and Drug Administration or the European Medicines Agency, Ms. Shogen will be entitled to receive an additional payment equal to the difference between the periodic payments actually paid to Ms. Shogen during the two year period commencing April 1, 2008 and $600,000, the original amount of periodic payments to which Ms. Shogen was entitled under the Retirement Agreement. Such additional payment may be made by Alfacell, at its option, in cash, Alfacell common stock or a combination of both. The Amendment is binding on the parties as of September 14, 2009 provided that the changes in payments to Ms. Shogen under the Retirement Agreement described above do not

go into effect unless and until Alfacell obtains additional equity or debt financing. Except as specifically amended in the Amendment, all terms and conditions of the Retirement Agreement remain in full force and effect.

On October 19, 2009, the Company entered into an Employment Agreement (the "Employment Agreement") with Mr. Muniz. Pursuant to the Employment Agreement, Mr. Muniz shall serve as the Company's President, Chief Executive Officer and Chief Financial Officer. Mr. Muniz will receive an annual base salary of $300,000 and is entitled to receive cash incentive compensation or annual stock option awards as determined by the Board or the Compensation Committee of the Board from time to time. In addition, Mr. Muniz is entitled to participate in any and all employee benefit plans established and maintained by the Company for executive officers of the Company. Pursuant to the Employment Agreement, Mr. Muniz will receive an option (the "Option"), granted under and in accordance with the Company's 2004 Stock Incentive Plan, to purchase an aggregate of 500,000 shares of Common Stock exercisable for ten years from the date the Option is granted. The Option shall vest in equal amounts on each of the first, second and third year anniversary of the grant so long as Mr. Muniz remains employed by the Company. The exercise price of the Option will equal the fair market value of the Common Stock on the date of grant.

The Employment Agreement continues in effect for two years following the date of the agreement and automatically renews for successive one-year periods, unless Mr. Muniz's employment is terminated by him or by the Company. In the event that Mr. Muniz's employment is terminated by the Company for any reason, then Mr. Muniz is entitled to receive his earned but unpaid base salary and incentive compensation, unpaid expense reimbursements, accrued but unused vacation and any vested benefits under any employee benefit plan of the Company. In the event that Mr. Muniz's employment is terminated by the Company without "cause" or by Mr. Muniz for "good reason" (as such terms are defined in the Employment Agreement), then in addition to the above mentioned payments and benefits, Mr. Muniz is entitled to receive an amount equal to his then current annual base salary, payable in equal installments over 12 months in accordance with the Company's payroll practice and all medical and health benefits for 18 months following the termination date. Mr. Muniz's Employment Agreement requires him to refrain from competing with the Company and from hiring our employees and soliciting our customers for a period of one year following the termination of his employment with the Company for any reason.

Mr. Muniz is an investor in the Company's Offering and is party to the Securities Purchase Agreement, the Investor Rights Agreement, the Security Agreement and the Escrow Agreement.

Lease Commitments

In November 2007, the Company entered into a capital lease agreement for its building security system for the term of five years with a payment of $635 per month. The lease agreement also gives the Company the right to purchase the leased equipment at the end of the lease term for $1.00 plus applicable taxes.

On March 14, 2007 the Company entered into an operating lease agreement for a period of ten years to lease space to relocate its corporate headquarters and laboratories to a new location in Somerset, New Jersey. This lease expires on the tenth anniversary plus 150 days after the commencement date of the lease which expiration date is expected to be November 2017. The first rental payment occurred on July 3, 2007 which is the lease commencement date. The lease may be renewed at the option of the Company for a period of two additional terms of 60 months each. In addition, the Company has received an incentive allowance of $205,000 with an option to receive an additional incentive allowance of $105,000. As of July 31, 2007 the Company has not exercised the additional incentive allowance of $105,000. Both allowances must be used for the cost of leasehold improvements made to the premises. If all or any portion of the remaining allowance is not used by the end of the original lease term of ten years any remaining balance may not be applied to the balance of any rent due at the conclusion of the initial lease term. As part of the operating lease agreement signed on March 14, 2007 the Company agreed to enter into an irrevocable letter of credit in the amount of $350,000 as security for such operating lease. This irrevocable letter of credit is collateralized by $350,000 in cash which is recorded in "Other Assets" in fiscal year ended July 31, 2008. If no event of default occurs under the operating lease the Company may reduce its security deposit under the operating lease to $250,000 on July 1, 2011, the fourth anniversary of the lease commencement date. In the event of no default as of July 1, 2012, the fifth anniversary of the lease commencement date, the irrevocable letter of credit may be reduced to $150,000 until the

initial term of the lease expires in 2017. As of July 31, 2009, the irrevocable letter of credit was reduced by $83,720 for payment of rent. Rent expense charged to operations was approximately $308,000 and $300,000 for fiscal year ended July 31, 2009 and 2008, respectively.

Prior to July 2007, the Company leased its facility on a month-to-month basis. Rent expense charged to operations was approximately $160,000, and $136,000 in each of fiscal years ended July 31, 2007 and 2006, respectively.

In June 2007, the Company entered into an operating lease agreement for its office equipment for the term of five years with a payment of approximately $1,600 per month. As part of the lease agreement, the Company agreed to terminate its existing office equipment lease. As a result of the early termination of the existing lease, the Company recognized an expense of approximately $31,000 which will be amortized using straight-line method over the term of the lease and will be charged as a reduction from the equipment rental expense. The new lease did not commence until August 2007. Rent expense charged to operations was approximately $12,000 for fiscal years ended July 31, 2009 and 2008. Under the previous lease agreement, equipment rental expense charged to operations was $16,000 and $12,000 in each of fiscal years ended July 31, 2007 and 2006, respectively.

Future minimum lease payments under noncancelable operating leases (with initial or remaining terms in excess of one year) as of July 31, 2009:

		Payments Due in Fiscal Year					
	Total	2010	2011	2012	2013	2014	2015 and Thereafter
Building lease	$ 2,750,685	$ 302,036	$ 317,446	$ 317,446	$ 317,446	$ 332,856	$ 1,163,455
Equipment lease	83,612	31,024	25,976	25,976	636	- -	-
Total contractual cash obligations	$ 2,834,297	$ 333,060	$ 343,422	$ 343,422	$ 318,082	$ 332,856	$ 1,163,455

Defined Contribution Retirement Plan (401(k) Plan)

Effective October 1, 1998, the Company adopted a 401(k) Savings Plan (the “Plan”). Qualified employees may participate by contributing to the Plan subject to certain Internal Revenue Service restrictions. The Company will match an amount equal to 50% of the first 6% of each participant’s contribution. The Company’s contribution is subject to a vesting schedule of 0%, 25%, 50%, 75% and 100% for employment of less than one year, one year, two years, three years and four years, respectively, except for existing employees which vesting schedule was based from the date the Plan was adopted. In April 2009, the Plan was amended to suspend the Company’s matching contribution. For the fiscal years ended July 31, 2009, 2008 and 2007, the Company's contributions to the Plan amounted to $17,252, $46,921, and $34,080, respectively.

(12) Contingencies

The Company has product liability insurance coverage for clinical trials in the U.S. and in other countries where it conducts its clinical trials. No product liability claims have been filed against the Company. If a claim arises and the Company is found liable in an amount that significantly exceeds the policy limits, it may have a material adverse effect upon the financial condition and results of operations of the Company.

On October 9, 2009, Robert Love, a former Chief Financial Officer and alleged shareholder of the Company, filed a complaint, Love v. Alfacell Corp. et al., Case No. 3:09-cv-05199-MLC-LHG (the “Complaint”), against the Company and certain of its current and former directors in the United States District Court, District of New Jersey, asserting violations of federal and state securities laws, direct and derivative common law claims for fraud and breach of fiduciary duty, and a direct claim for negligent misrepresentation in connection with the Company’s Phase IIIb clinical trial for ONCONASE®. The Complaint alleges that the Company misled shareholders by issuing allegedly false projections of when the required number of patients deaths would occur in the Phase IIIb trial. The Complaint seeks compensatory damages of no less than $350,000, punitive damages of no less than $20 million, and an accounting and constructive trust. The Company believes that the claims are meritless and intends to defend the case vigorously.

Premier Research Group filed and served a lawsuit against the Company in the Superior Court of New Jersey, Law Division, Essex County, on or about July 26, 2009, seeking the recovery of professional fees that arose from clinical trials purportedly performed in Europe by Premier Research Group as signee of a contract between Alfacell Corporation and IMFORM GmbH dated October 27, 2005. An Answer with Separate Defenses and Counterclaim was filed on or about July 30, 2009. This case remains in the early stages of discovery.

I & G Garden State, LLC ("Landlord") filed and served a complaint against the Company in the Superior Court of New Jersey Law Division, Special Civil Part Landlord-Tenant Section, Somerset County, on or about October 30, 2009, for non-payment of rent and failure to maintain security deposit. The complaint seeks to have the Company vacate the property. Although Landlord filed this complaint, Landlord has been drawing funds from the Company's secured irrevocable letter of credit which was placed in March 2007 in the amount of $350,000.

(13) Subsequent Events

On September 8, 2009, the Company and Par entered into a Termination and Mutual Release Agreement (the "Termination Agreement") pursuant to which the License Agreement and Supply Agreement, each dated January 14, 2008 between Alfacell and Par, were terminated. See Note 1 – Summary of Significant Accounting Policies – Revenue Recognition.

On September 14, 2009, the Company entered into an amendment (the "Amendment") to the Retirement Agreement between the Company and Kuslima Shogen, the Company's former CEO and scientific founder. See Note 11 – Commitments – Employment and Retirement Agreements.

On October 19, 2009, the Company entered into an Employment Agreement (the "Employment Agreement") with Mr. Muniz the Company's President, Chief Executive Officer and Chief Financial Officer. See Note 11 – Commitments – Employment and Retirement Agreements.

On October 19, 2009, the Company completed a sale of 65 units (the "Units") in a private placement (the "Offering") to certain investors pursuant to a securities purchase agreement (the "Securities Purchase Agreement") entered into on October 19, 2009. Each Unit consists of (i) $50,000 principal amount of 5% Senior Secured Convertible Promissory Notes (collectively, the "Notes") convertible into shares of the Company's common stock, par value $.001 per share ("Common Stock"), (ii) Series A Common Stock Purchase Warrants (the "Series A Warrants") to purchase in the aggregate that number of shares of Common Stock initially issuable upon conversion of the aggregate amount of Notes issued as part of the Unit, at an exercise price of $0.15 per share with a three year term and (iii) Series B Common Stock Purchase Warrants (the "Series B Warrants", together with the Series A Warrants, the "Warrants") to purchase in the aggregate that number of shares of Common Stock initially issuable upon conversion of the aggregate amount of Notes issued as part of the Unit, at an exercise price of $0.25 per share with a five year term. The closing of the Offering occurred on October 19, 2009 (the "Closing") and the Company received an aggregate of $3,250,000 in gross proceeds.

The Notes mature on the earlier of (i) October 19, 2012; (ii) the closing of a public or private offering of the Company's debt or equity securities subsequent to the date of issuance resulting in gross proceeds of at least $8,125,000 other than a transaction involving a stockholder who holds 5% or more of the Company's outstanding capital stock as of the date of issuance; or (iii) on the demand of the holder of the Note upon the Company's consummation of a merger, sale of substantially all of its assets, or the acquisition by any entity, person or group of 50% or more of the voting power of the Company. Interest accrues on the principal amount outstanding under the Notes at a rate of 5% per annum, and is due upon maturity. Upon an event of default under the Notes, the interest rate shall increase to 7%, provided that if the Company is unable to obtain stockholder approval by April 1, 2010 to amend its certificate of incorporation to increase its authorized capital stock, the interest rate shall increase to 15% and such failure will be an Event of Default under the Notes. The Notes are convertible into Common Stock at the option of the holder of the Note at a price of $0.15 per share at any time prior to the date on which the Company makes payment in full of all amounts outstanding under the Note. The Notes are not prepayable for a period of one year following the issuance thereof. The Notes are secured by a senior security interest and lien on all of the Company's right, title and interest to all of the assets owned by the Company as of the Closing or thereafter acquired pursuant to the terms of a security agreement (the "Security Agreement") entered into the by the Company with each of the investors. The Warrants are exercisable immediately following the Closing.

Pursuant to the terms of the Securities Purchase Agreement, certain investors party thereto are permitted to appoint a designee to the Company's Board of Directors (the "Board") within a reasonable period of time following the Closing. In addition, as a condition to Closing, each member of the Board other than David Sidransky, Chairman of the Board, and Mr. Muniz agreed to resign from the Board upon the request of Dr. Sidransky made at any time following the Closing and December 31, 2009.

In connection with the Offering, the Company entered into an investor rights agreement (the "Investor Rights Agreement") with each of the investors. The Investor Rights Agreement provides that the Company will file a "resale" registration statement (the "Initial Registration Statement") covering all of the shares issuable upon conversion of the Notes (the "Note Shares") and the shares issuable upon exercise of the Warrants (the "Warrant Shares", together with the Note Shares, the "Securities"), up to the maximum number of shares able to be registered pursuant to applicable Securities and Exchange Commission ("SEC") regulations, within 120 days of the Closing. If any Securities are unable to be included on the Initial Registration Statement, the Company has agreed to file subsequent registration statements until all the Securities have been registered. Under the terms of the Investor Rights Agreement, the Company is obligated to maintain the effectiveness of the "resale" registration statement until all securities therein are sold or are otherwise can be sold pursuant to Rule 144, without any restrictions. A cash penalty at the rate of 1% per month will be triggered in the event the Company fails to file or obtain the effectiveness of a registration statement prior to the deadlines set forth in the Investor Rights Agreement or if the Company ceases to be current in filing its periodic reports with the SEC. The aggregate penalty accrued with respect to each investor may not exceed 6% of the original purchase price paid by that investor, or 12% if the only effectiveness failure is the Company's failure to be current in its periodic reports with the SEC.

In connection with the Offering, the Company also entered into an escrow agreement (the "Escrow Agreement") whereby certain investors placed $1,600,000 of the proceeds paid for their Units in an escrow account pursuant to the terms of the Securities Purchase Agreement. Such amounts can be disbursed from the escrow account only to satisfy obligations of the Company owed to clinical research organizations, hospitals, doctors and other vendors and service providers associated with the clinical trials which the Company intends to conduct for its ONCONASE® product. The Escrow Agreement shall terminate on the earlier of the date that all funds have been disbursed from the escrow account and April 19, 2011, at which time any remaining funds will be disbursed to the Company.

Charles Muniz, the Company's President, Chief Executive Officer and Chief Financial Officer, subscribed for 20 Units, certain trusts and individuals related to James O. McCash, a beneficial owner of more than five percent of the Company's voting securities, subscribed for an aggregate of 20 Units, Europa International Inc., a beneficial owner of more than five percent of the Company's voting securities, subscribed for 15 Units and Unilab LP, an affiliate of US Pharmacia, an affiliate of the Company's distributor for ONCONASE® in Eastern Europe and a current stockholder, subscribed for 10 units. These investors are party to the Securities Purchase Agreement, the Investor Rights Agreement, the Security Agreement and the Escrow Agreement. The Company's entry into an employment agreement with Mr. Muniz upon terms reasonably acceptable to the investors in the Offering was a condition to the Closing.

On October 9, 2009, Robert Love, a former Chief Financial Officer and alleged shareholder of the Company, filed a complaint, Love v. Alfacell Corp. et al., Case No. 3:09-cv-05199-MLC-LHG (the "Complaint"), against the Company and certain of its current and former directors in the United States District Court, District of New Jersey, asserting violations of federal and state securities laws, direct and derivative common law claims for fraud and breach of fiduciary duty, and a direct claim for negligent misrepresentation in connection with the Company's Phase IIIb clinical trial for ONCONASE®. The Complaint alleges that the Company misled shareholders by issuing allegedly false projections of when the required number of patients deaths would occur in the Phase IIIb trial. The Complaint seeks compensatory damages of no less than $350,000, punitive damages of no less than $20 million, and an accounting and constructive trust. The Company believes that the claims are meritless and intends to defend the case vigorously.

F-49

(14) Unaudited Quarterly Financial Data

The following table is the quarterly data for the two years ended July 31, 2009 and 2008:

(In thousands, except per share amounts)

	2009					2008				
	First	Second	Third	Fourth	Totals	First	Second	Third	Fourth	Totals
Investment income	$19	$5	$1	1	$26	$61	$66	$67	34	$228
Operating loss	(2,821)	(1,798)	(696)	(384)	(5,699)	(2,787)	(3,507)	(5,092)	(2,915)	(14,301)
Net loss (a)	(2,803)	(654)	(696)	(386)	(4,539)	(2,727)	(1,687)	(5,026)	(2,881)	(12,321)
Loss per share – basic and diluted	$(0.06)	$(0.01)	$(0.01)	$(0.01)	$(0.10)	$(0.06)	$(0.04)	$(0.11)	$(0.06)	$(0.26)

(a) The net loss of $654 for the second quarter of 2009 and $1,687 for the second quarter of 2008 is net of state tax benefits of $1,140 and $1,755, respectively, related to the sale of certain state tax operating loss carryforwards.

ALFACELL CORPORATION
(A Development Stage Company)

CONDENSED BALANCE SHEETS
January 31, 2010 and July 31, 2009

	January 31, 2010 (Unaudited)	July 31, 2009 (See Note 1)
ASSETS		
Current assets:		
Cash and cash equivalents	$683,370	$129,194
Prepaid expenses	138,022	54,494
Total current assets	821,392	183,688
Property and equipment, net of accumulated depreciation and amortization of $370,635 at January 31, 2010 and $377,134 at July 31, 2009	39,896	108,018
Restricted cash	1,681,219	266,280
Deferred financing cost	117,201	–
Total assets	$2,659,708	$557,986
LIABILITIES AND STOCKHOLDERS' DEFICIENCY		
Current liabilities:		
Accounts payable	$519,339	$407,273
Accrued clinical trial expenses	431,246	459,911
Accrued professional service fees	356,352	350,486
Accrued compensation expense	183,436	207,245
Derivative liability	9,486,914	-
Current portion of obligations under capital lease	4,797	4,299
Convertible debt, less debt discount of $2,944,292	305,708	-
Other accrued expenses	81,103	2,890
Total current liabilities	11,368,895	1,432,104
Other liabilities:		
Accounts payable, net of current portion	444,223	444,223
Obligations under capital lease, net of current portion	10,111	12,641
Accrued retirement benefits	257,250	335,250
Accrued interest, convertible debt (related party, $17,451)	45,857	-
Deferred rent	15,482	284,134
Deferred revenue	5,200,000	5,200,000
Total other liabilities	5,972,923	6,276,248
Total liabilities	17,341,818	7,708,352
Commitments and contingencies		
Stockholders' deficiency:		
Preferred stock, $.001 par value. Authorized and unissued, 1,000,000 shares at January 31, 2010 and July 31, 2009	–	–
Common stock $.001 par value. Authorized 100,000,000 shares at January 31, 2010 and July 31, 2009; issued and outstanding 47,313,880 shares at January 31, 2010 and July 31, 2009	47,314	47,314
Capital in excess of par value	101,150,684	101,734,572
Deficit accumulated during development stage	(115,880,108)	(108,932,252)
Total stockholders' deficiency	(14,682,110)	(7,150,366)
Total liabilities and stockholders' deficiency	$2,659,708	$557,986

See accompanying notes to condensed financial statements.

ALFACELL CORPORATION
(A Development Stage Company)

CONDENSED STATEMENTS OF OPERATIONS

Three and six months ended January 31, 2010 and 2009,
and the Period from August 24, 1981
(Date of Inception) to January 31, 2010

(Unaudited)

	Three Months Ended January 31,		Six Months Ended January 31,		August 24, 1981 (Date of Inception) to January 31,
	2010	2009	2010	2009	2010
Sales	$-	$-	$18,750	$-	$572,239
Operating expenses:					
Cost of sales	-	-	-	-	336,495
Research and development	121,774	1,097,853	282,655	2,825,234	72,864,535
General and administrative	428,214	700,236	827,687	1,793,709	41,791,576
Total operating expenses	549,988	1,798,089	1,110,342	4,618,943	114,992,606
Loss from operations	(549,988)	(1,798,089)	(1,091,592)	(4,618,943)	(114,420,367)
Investment income	417	5,519	668	24,083	2,302,749
Other income	-	-	-	-	99,939
Interest:					
Related parties, net	(10,725)	-	(17,451)	-	(1,164,998)
Debt discount and fair value adjustment – derivative security	3,643,697	-	(5,795,386)	-	(5,795,386)
Others	(42,332)	(1,068)	(44,095)	(2,181)	(2,927,301)
Income (loss) before state tax benefit	3,041,069	(1,793,638)	(6,947,856)	(4,597,041)	(121,905,364)
State tax benefit	-	1,139,867	-	1,139,867	6,025,256
Net income (loss)	$3,041,069	$(653,771)	$(6,947,856)	$(3,457,174)	$(115,880,108)
Income (loss) per common share - basic	$0.06	$(0.01)	$(0.15)	$(0.07)	
Loss per common share - diluted	$(0.01)	$(0.01)	$(0.15)	$(0.07)	
Weighted average number of shares					
outstanding - basic	47,313,880	47,313,880	47,313,880	47,312,195	
	90,647,208	47,313,880	47,313,880	47,312,195	

Weighted average number of shares outstanding - diluted	

See accompanying notes to condensed financial statements.

ALFACELL CORPORATION
(A Development Stage Company)

CONDENSED STATEMENT OF STOCKHOLDERS' DEFICIENCY

Period from July 31, 2009 to January 31, 2010

(Unaudited)

	Common Stock		Capital In Excess of par Value	Deficit Accumulated During Development Stage	Total Stockholders' Deficiency
	Number of Shares	Amount			
Balance at July 31, 2009	47,313,880	$47,314	$101,734,572	$(108,932,252)	$(7,150,366)
Stock-based compensation	—	—	163,347	—	163,347
Derivative liability	—	—	(747,235)	—	(747,235)
Net loss	—	—	—	(6,947,856)	(6,947,856)
Balance at January 31, 2010	47,313,880	$47,314	$101,150,684	$(115,880,108)	$(14,682,110)

See accompanying notes to condensed financial statements.

ALFACELL CORPORATION
(A Development Stage Company)

CONDENSED STATEMENTS OF CASH FLOWS

Six months ended January 31, 2010 and 2009,
and the Period from August 24, 1981
(Date of Inception) to January 31, 2010

(Unaudited)

	Six Months Ended January 31,		August 24, 1981 (Date of Inception) to January 31,
	2010	2009	2010
Cash flows used in operating activities:			
Net loss	$(6,947,856)	$(3,457,174)	$(115,880,108)
Adjustments to reconcile net loss to net cash used in operating activities:			
Gain on sale of marketable equity securities	-	-	(25,963)
Depreciation and amortization	70,372	18,443	1,815,966
Loss on disposal of property and equipment	-	-	18,926
Loss on lease termination	-	-	30,964
Share-based compensation	163,347	764,339	14,027,279
Amortization of deferred rent	(268,652)	21,439	(82,482)
Amortization of debt discount	305,708	-	899,927
Fair value of derivative liability	5,489,678	-	5,489,678
Amortization of deferred compensation	-	-	11,442,000
Changes in assets and liabilities:			
Decrease (increase) in prepaid expenses	(83,528)	5,471	(197,889)
Decrease in loan receivable, related party	-	-	96,051
Increase in restricted cash	(1,414,939)	-	(1,681,219)
Increase in deferred financing cost	(117,201)	-	(117,201)
Increase in interest payable-related party	17,451	-	761,990
Increase (decrease) in accounts payable	112,066	(414,787)	1,470,197
Increase in accrued payroll and expenses, related parties	-	-	2,348,145
(Decrease) increase in accrued retirement benefits	(104,442)	-	413,250
Increase (decrease) in accrued expenses	86,454	(414,601)	1,643,427
Increase in deferred revenue	-	-	5,200,000
Net cash used in operating activities	(2,691,542)	(3,476,870)	(72,327,062)
Cash flows used in investing activities:			
Purchase of marketable equity securities	-	-	(290,420)
Purchase of short-term investments	-	-	(1,993,644)
Proceeds from sale of marketable equity securities	-	-	316,383
Proceeds from sale of short-term investments	-	-	1,993,644
Capital expenditures	(2,250)	-	(1,607,316)
Patent costs	-	-	(97,841)
Net cash used in investing activities	(2,250)	-	(1,679,194)

(continued)

See accompanying notes to condensed financial statements.

ALFACELL CORPORATION
(A Development Stage Company)

CONDENSED STATEMENTS OF CASH FLOWS, Continued

Six months ended January 31, 2010 and 2009,
and the Period from August 24, 1981
(Date of Inception) to January 31, 2010

(Unaudited)

	Six Months Ended January 31,		August 24, 1981 (Date of Inception) to January 31,
	2010	2009	2010
Cash flows from financing activities:			
Proceeds from short-term borrowings	$-	$-	$874,500
Payment of short-term borrowings	-	-	(653,500)
Increase in loans payable - related party, net	-	-	2,628,868
Proceeds from bank debt and other long-term debt, net of costs	-	-	3,667,460
Reduction of bank debt and long-term debt	-	-	(2,966,568)
Payment of capital lease obligation	(2,032)	(1,633)	(8,870)
Proceeds from issuance of common stock, net	-	-	53,102,893
Proceeds from exercise of stock options and warrants, net	-	13,220	14,080,850
Proceeds from issuance of convertible debentures, related party	3,250,000	-	3,547,000
Proceeds from issuance of convertible debentures, unrelated party	-	-	416,993
Net cash provided by financing activities	3,247,968	11,587	74,689,626
Net increase (decrease) in cash and cash equivalents	554,176	(3,465,283)	683,370
Cash and cash equivalents at beginning of period	129,194	4,661,656	-
Cash and cash equivalents at end of period	$683,370	$1,196,373	$683,370
Supplemental disclosure of cash flow information – interest paid	$3,374	$2,181	$1,726,634
Noncash financing activities:			
Issuance of convertible subordinated debenture for loan payable to officer	$ -	$ -	$2,725,000
Issuance of common stock upon the conversion of convertible subordinated debentures, related party	$ -	$ -	$3,242,000
Conversion of short-term borrowings to common stock	$ -	$ -	$226,000
Conversion of accrued interest, payroll and expenses by related parties to stock options	$ -	$ -	$3,194,969
Repurchase of stock options from related party	$ -	$ -	$(198,417)
Conversion of accrued interest to stock options	$ -	$ -	$142,441
Conversion of accounts payable to common stock	$ -	$ -	$506,725

(continued)

See accompanying notes to condensed financial statements.

ALFACELL CORPORATION
(A Development Stage Company)

CONDENSED STATEMENTS OF CASH FLOWS, Concluded

Six months ended January 31, 2010 and 2009,
and the Period from August 24, 1981
(Date of Inception) to January 31, 2010

(Unaudited)

	Six Months Ended January 31,		August 24, 1981 (Date of Inception) to January 31,
	2010	2009	2010
Conversion of notes payable, bank and accrued interest to long-term debt	$-	$ -	$1,699,072
Conversion of loans and interest payable, related party and accrued payroll and expenses, related parties to long-term accrued payroll and other, related party	$-	$ -	$1,863,514
Issuance of common stock upon the conversion of convertible subordinated debentures, other	$-	$ -	$1,584,364
Issuance of common stock for services rendered	$-	$ -	$2,460
Lease incentive allowance	$-	$ -	$67,000
Derivative liability – warrant reclassification	$747,235	$ -	$747,235
Issuance of warrants with notes payable	$-	$ -	$594,219
Acquisition of equipment through capital lease obligation	$-	$ -	$23,778

See accompanying notes to condensed financial statements.

ALFACELL CORPORATION
(A Development Stage Company)

NOTES TO CONDENSED FINANCIAL STATEMENTS

(Unaudited)

1. ORGANIZATION AND BASIS OF PRESENTATION

In the opinion of management, the accompanying unaudited condensed financial statements of Alfacell Corporation ("Alfacell" or the "Company") have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") for interim financial information and with the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not contain all of the information and notes required by U.S. GAAP for complete financial statements. In the opinion of management, the accompanying unaudited condensed interim financial statements contain all adjustments (consisting of normal recurring adjustments) necessary to present fairly the Company's financial position as of January 31, 2010, the results of its operations for the three and six months ended January 31, 2010 and 2009, and the period from August 24, 1981 (date of inception) to January 31, 2010, the changes in stockholders' deficiency for the six months ended January 31, 2010, and its cash flows for the six month periods ended January 31, 2010 and 2009, and the period from August 24, 1981 (date of inception) to January 31, 2010. The results of operations for the three and six months ended January 31, 2010 are not necessarily indicative of operating results for fiscal year 2010 or future interim periods. The July 31, 2009 balance sheet presented herein has been derived from the audited financial statements included in the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2009, filed with the Securities and Exchange Commission.

Certain footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been omitted in accordance with the rules and regulations of the Securities and Exchange Commission. The condensed financial statements in this report should be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2009.

Financial instruments consist primarily of cash and cash equivalents, accounts receivable, and accounts payable. The carrying value of these financial instruments approximates fair value due to the relative short term nature of these investments and the carrying value of the notes approximates their fair value.

The Company evaluated all events or transactions that occurred after January 31, 2010 through the date the financial statements were issued.

The Company is a development stage company as defined in the Accounting Standards Codification ("ASC") "Development Stage Entities." The Company is devoting substantially all of its present efforts to establishing its business. Its planned principal operations have not commenced and, accordingly, no significant revenue has been derived therefrom.

The Company is continuing to develop its drug product candidates, which require substantial capital for research, product development, and market development activities. The Company has not yet initiated marketing of a commercial drug product. Future product development will require clinical testing, regulatory approval, and substantial additional investment prior to commercialization. The future success of the Company is dependent on its ability to make progress in the development of its drug product candidates and, ultimately, upon its ability to attain future profitable operations through the successful manufacturing and marketing of those drug product candidates. There can be no assurance that the Company will be able to obtain the necessary financing or regulatory approvals to be able to successfully develop, manufacture, and market its products, or attain successful future

operations. Accordingly, the Company's future success is uncertain.

2. LIQUIDITY

The Company has reported net income of approximately $3,041,000 for the three months ended January 31, 2010 due primarily to the change in fair value of derivative liability at January 31, 2010 and net losses of approximately $6,948,000 for the six months ended January 31, 2010, and $4,539,000, $12,321,000 and $8,755,000 for the fiscal years ended July 31, 2009, 2008 and 2007, respectively. As of January 31, 2010, the Company had a working capital deficit of approximately $10,547,000 and cash and cash equivalents of approximately $683,000. The loss from date of inception, August 24, 1981, to January 31, 2010 amounts to approximately $115,880,000.

The Company expects that its cash balances, including the proceeds received in February 2010 from the sale of its state tax benefit of approximately $0.6 million, and the $1.6 million restricted cash intended to be used for future clinical trials as of January 31, 2010, will be sufficient to support its activities through July 2010, based on its reduced level of operations. The Company's long-term continued operations will depend on its ability to raise additional funds through various potential sources such as equity and debt financing, convertible debentures, collaborative agreements, strategic alliances, sale of tax
benefits, revenues from the commercial sale and named-patient basis sale of ONCONASE®, licensing of its proprietary RNase technology and its ability to realize revenues from its technology and its drug candidates via out-licensing agreements with other companies. The Company may pursue available strategic alternatives which focus on, but not limited to, strategic partnership transactions. Such additional funds and various alternatives may not become available as the Company may need them or be available on terms acceptable to the Company, if at all. Insufficient funds could require the Company to delay, scale back, or eliminate one or more of its research and development programs or to out-license to third parties drug product candidates or technologies that the Company would otherwise seek to develop and commercialize without relinquishing its rights thereto. Unless and until the Company's operations generate significant revenues and cash flow, the Company will attempt to continue to fund operations from cash on hand and through the sources of capital described above. There can be no assurance that the Company will be able to raise the capital it needs on terms which are acceptable, if at all.

The audit report of the Company's independent registered public accounting firm on the Company's fiscal year ended July 31, 2009 financial statements expressed that there was substantial doubt about the Company's ability to continue as a going concern. Continued operations are dependent on the Company's ability to raise additional capital from various sources such as those described above. Such capital raising opportunities may not be available or may not be available on reasonable terms. The Company's financial statements do not include any adjustments that may result from the outcome of this uncertainty.

3. INCOME (LOSS) PER COMMON SHARE

The Company presents "basic" income (loss) per common share and, if applicable, "diluted" income per common share pursuant to the provisions of ASC "Earnings per Share". Basic income (loss) per common share is calculated by dividing net income or loss by the weighted average number of common shares outstanding during each period. The calculation of diluted earnings per share is similar to that of basic earnings per share, except that the denominator is increased to include the number of additional common shares that would have been outstanding if all potentially dilutive common shares, such as those issuable upon the exercise of outstanding stock options and warrants and the conversion of outstanding convertible debentures were issued during the period and the treasury stock method had been applied to the proceeds from the exercise of the options and warrants and net income or loss was adjusted for interest on the convertible debentures.

As of January 31, 2010, there were stock options, warrants and convertible notes outstanding for the purchase of a total of 3,624,267, 51,183,890 and 21,666,664 shares of common stock, respectively (see Notes 4 and 6 herein). However, diluted per share amounts presented in the accompanying condensed consolidated statements of operations for the three months ended January 31, 2009 and the six months ended January 31, 2010 and 2009 are the same as basic per common share amounts because the Company has incurred a net loss for these periods and the basic and diluted per common share amounts are the same, since the inclusion of all potentially dilutive securities would be anti-dilutive. For the three months ended January 31, 2010, the accompanying condensed consolidated statements of operations presented an income per basic common share and a loss per diluted common share after including interest expense related to convertible debentures and in-the-money potentially dilutive securities.

The following table sets forth the computation of basic and diluted net income (loss) per common share:

	Three Months Ended	Six Months Ended
Basic income (loss) per common share:	January 31,	January 31,

	2010	2009	2010	2009
Numerator:				
Net income (loss)	$3,041,069	$(653,771)	$(6,947,856)	$(3,457,174)
Denominator:				
Basic weighted average number of common shares outstanding	47,313,880	47,313,880	47,313,880	47,312,195
Basic income (loss) per common share	$0.06	$(0.01)	$(0.15)	$(0.07)

	Three Months Ended
Diluted loss per common share:	January 31, 2010
Numerator:	
Net income	$ 3,041,069
Add: Interest expense on convertible notes	51,444
Deduct: Debt discount and fair value change on derivative security	(3,643,697)
Adjusted net loss	$ (551,184)
Denominator:	
Basic weighted average number of common shares outstanding	47,313,880
Add: Potentially dilutive securities	
Warrants	21,666,664
Convertible notes	21,666,664
Diluted weighted average number of common shares	90,647,208
Diluted loss per common share	$ (0.01)

4. SHARE-BASED COMPENSATION

In December 2004, the Financial Accounting Standards Board ("FASB") issued amended guidance on accounting for "Stock Compensation". The amended guidance requires all share-based payments, including stock option grants to employees, to be recognized as an operating expense in the statement of operations. The expense is recognized over the requisite service period based on fair values measured on the date of grant. The Company adopted the amended guidance on Stock Compensation effective August 1, 2005 using the modified prospective method and, accordingly, prior period amounts have not been restated. Under the modified prospective method, the fair value of all new stock options issued after July 31, 2005 and the unamortized fair value of unvested outstanding stock options at August 1, 2005 are recognized as expense as services are rendered.

Shares, warrants and options have been issued to non-employees for services. The fair value of such securities is recorded as an expense and additional paid-in capital in stockholders' equity over the applicable service periods using variable accounting through the vesting date based on the fair value of the securities at the end of each period or the vesting date.

The Company recorded the following stock-based compensation expense based on the fair value of stock options:

	Three Months Ended January 31,		Six Months Ended January 31,	
	2010	2009	2010	2009
Research and development	$18,516	$26,927	$16,808	$268,144
General and administrative	69,946	104,137	146,539	496,195
Total share-based compensation expense	$88,462	$131,064	$163,347	$764,339
Basic and diluted loss per common share	$0.00	$0.00	$0.00	$0.02

The fair value of the stock options at the grant dates was estimated using the Black-Scholes option pricing model based on the weighted-average assumptions as noted in the following table. The risk-free interest rate for periods approximating the expected life of the option is based on the U.S. Treasury yield curve in effect at the time of grant. The expected stock price volatility is based on the historical volatility of the Company's stock price. For post July 31, 2005 grants, the expected term until exercise is derived using the "simplified" method as allowed under the provisions of SAB 107 and SAB 110 and represents the period of time that options granted are expected to be

outstanding. The “simplified” method was used since the Company does not have sufficient historical data to provide a basis to estimate a justifiable expected term. There were no stock options granted during the three months ended January 31, 2010.

	Three Months Ended January 31,		Six Months Ended January 31,	
	2010	2009	2010	2009
Expected dividend yield	-	0 %	0 %	0 %
Risk-free interest rate	-	1.00 %	2.64 %	1.00 %
	2010	2009	2010	2009
Expected stock price volatility	-	102.13 %	111.39 %	102.13 %
Expected term (years)	-	3.5	5.89	3.5
Weighted average grant date fair value	-	$0.16	$0.28	$0.16

The following table summarizes the stock option activity for the period August 1, 2009 to January 31, 2010:

	Stock Options Outstanding	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Balance August 1, 2009	4,771,650	$2.64	3.84	$12,230
Granted	511,667	0.34	9.86	
Exercised	-	-		
Expired	(1,651,050)	3.73		
Forfeited	(8,000)	1.29		
Balance January 31, 2010	3,624,267	$1.82	5.72	$0
Exercisable as of January 31, 2010	2,124,267	$2.09	3.59	$0

As of January 31, 2010, there was approximately $854,000 of total unrecognized compensation expense related to unvested options granted that is expected to be recognized over a weighted average period of 3.4 years.

5. RESTRICTED CASH

Lease security deposit held by a bank as collateral for a standby letter of credit in favor of the Company. The cash held by the bank is restricted as to use for the term of the standby letter of credit. In February 2010, this amount was drawn by the landlord as a court judgment in their favor.	$ 81,084
Escrow agreement held by bank which can be disbursed only to satisfy obligations of the Company owed to clinical research organizations, hospitals, doctors and other vendors and service providers associated with the clinical trials which the Company intends to conduct for its ONCONASE® product. The escrow agreement shall terminate on the earlier of the date that all funds have been disbursed from the escrow account and April 19, 2011, at which time any remaining funds will be disbursed to the Company.	1,600,135
Total	$1,681,219

6. CONVERTIBLE NOTES AND WARRANTS

On October 19, 2009, the Company completed a sale of 65 units (the “Units”) in a private placement (the “Offering”) to certain investors pursuant to a securities purchase agreement (the “Securities Purchase Agreement”) entered into on October 19, 2009. Each Unit consists of (i) $50,000 principal amount of 5% Senior Secured Convertible Promissory

Notes (collectively, the "Notes") convertible into shares of the Company's common stock, par value $.001 per share ("Common Stock"), (ii) Series A Common Stock Purchase Warrants (the "Series A Warrants") to purchase in the aggregate that number of shares of Common Stock initially issuable upon conversion of the aggregate amount of Notes issued as part of the Unit, at an exercise price of $0.15 per share with a three year term and (iii) Series B Common Stock Purchase Warrants (the "Series B Warrants", together with the Series A Warrants, the "Warrants") to purchase in the aggregate that number of shares of Common Stock initially issuable upon conversion of the aggregate amount of Notes issued as part of the Unit, at an exercise price of $0.25 per share with a five year term. The closing of the Offering occurred on October 19, 2009 (the "Closing") and the Company received an aggregate of $3,250,000 in gross proceeds.

The Notes mature on the earlier of (i) October 19, 2012; (ii) the closing of a public or private offering of the Company's debt or equity securities subsequent to the date of issuance resulting in gross proceeds of at least $8,125,000 other than a transaction involving a stockholder who holds 5% or more of the Company's outstanding capital stock as of the date of issuance; or (iii) on the demand of the holder of the Note upon the Company's consummation of a merger, sale of substantially all of its assets, or the acquisition by any entity, person or group of 50% or more of the voting power of the Company. Interest accrues on the principal amount outstanding under the Notes at 5% per annum, and is due upon maturity. Upon an event of default under the Notes, the interest rate shall increase to 7%, provided that if the Company is unable to obtain stockholder approval by May 1, 2010, which date was extended from April 1, 2010 pursuant to an amendment to the Securities Purchase Agreement entered into by the Company and the investors on February 26, 2010 and reported on Form 8-K filed by the Company on March 4, 2010, to amend its certificate of incorporation to increase its authorized capital stock, the interest rate shall increase to 15% and such failure will be an Event of Default under the Notes. The Notes are convertible into Common Stock at the option of the holder of the Note at a price of $0.15 per share at any time prior to the date on which the Company makes payment in full of all amounts outstanding under the Note. The Notes are not prepayable for a period of one year following the issuance thereof. The Notes are secured by a senior security interest and lien on all of the Company's right, title and interest to all of the assets owned by the Company as of the Closing or thereafter acquired pursuant to the terms of a security agreement (the "Security Agreement") entered into by the Company with each of the investors. The Warrants are exercisable immediately following the Closing.

Pursuant to the terms of the Securities Purchase Agreement, certain investors party thereto are permitted to appoint a designee to the Company's Board of Directors (the "Board") within a reasonable period of time following the Closing. In addition, as a condition to Closing, each member of the Board other than David Sidransky, Chairman of the Board, and Charles Muniz, President, Chief Executive Officer and Chief Financial Officer, agreed to resign from the Board upon the request of Dr. Sidransky made at any time following the Closing and December 31, 2009. On January 2, 2010 and January 29, 2010, respectively, Donald Conklin and Kuslima Shogen resigned from the Board. Stephen Carter will not seek reelection at the Company's upcoming annual meeting of the stockholders, which is presently scheduled to occur on Tuesday, April 27, 2010.

In connection with the Offering, the Company entered into an investor rights agreement (the "Investor Rights Agreement") with each of the investors. The Investor Rights Agreement provides that the Company will file a "resale" registration statement (the "Initial Registration Statement") covering all of the shares issuable upon conversion of the Notes (the "Note Shares") and the shares issuable upon exercise of the Warrants (the "Warrant Shares", together with the Note Shares, the "Securities"), up to the maximum number of shares able to be registered pursuant to applicable Securities and Exchange Commission ("SEC") regulations, within 120 days of the Closing (the "Filing Deadline"). On February 26, 2010, the Company and the investors amended the Investor Rights Agreement (the "Rights Agreement Amendment") to extend the Filing Deadline to May 1, 2010, which Rights Agreement Amendment was filed with the Form 8-K filed by the Company on March 4, 2010. If any Securities are unable to be included on the Initial Registration Statement, the Company has agreed to file subsequent registration statements until all the Securities have been registered. Under the terms of the Investor Rights Agreement, the Company is obligated to maintain the effectiveness of the "resale" registration statement until all securities therein are sold or otherwise can be sold pursuant to Rule 144, without any restrictions. A cash penalty at 1% per month will be triggered in the event the Company fails to file or obtain the effectiveness of a registration statement prior to the deadlines set forth in the Investor Rights Agreement, which deadlines were extended by the Rights Agreement Amendment, or if the Company ceases to be current in filing its periodic reports with the SEC. The aggregate penalty accrued with respect to each investor may not exceed 6% of the original purchase price paid by that investor, or 12% if the only effectiveness failure is the Company's failure to be current in its periodic reports with the SEC.

In connection with the Offering, the Company also entered into an escrow agreement (the "Escrow Agreement") whereby certain investors placed $1,600,000 of the proceeds paid for their Units in an escrow account pursuant to the terms of the Securities Purchase Agreement. Such amounts can be disbursed from the escrow account only to satisfy

obligations of the Company owed to clinical research organizations, hospitals, doctors and other vendors and service providers associated with the clinical trials which the Company intends to conduct for its ONCONASE® product. The Escrow Agreement shall terminate on the earlier of the date that all funds have been disbursed from the escrow account and April 19, 2011, at which time any remaining funds will be disbursed to the Company.

Charles Muniz, the Company's President, Chief Executive Officer and Chief Financial Officer, subscribed for 20 Units; certain trusts and individuals related to James O. McCash, a beneficial owner of more than five percent of the Company's voting securities, subscribed for an aggregate of 20 Units; Europa International Inc., a beneficial owner of more than five percent of the Company's voting securities, subscribed for 15 Units; and Unilab LP, an affiliate of US Pharmacia, an affiliate of the Company's distributor for ONCONASE® in Eastern Europe and a current stockholder, subscribed for 10 units. These investors are party to the Securities Purchase Agreement, the Investor Rights Agreement, the Security Agreement and the Escrow Agreement. The Company's entry into an employment agreement with Mr. Muniz upon terms reasonably acceptable to the investors in the Offering was a condition to the Closing.

The Company concluded that it should account for the warrants and conversion options embedded in the Notes in accordance with ASC Topic 815, "Derivatives and Hedging". Accordingly, the Company determined that the warrants and the conversion options embedded in the Notes should be accounted for as free standing derivatives that will be measured at fair value and classified as liabilities at the closing of the Offering. Each subsequent reporting period, the Company will mark to market the warrants and conversion feature of Notes with any change in fair value recorded through the statement of operations. This accounting treatment is due to the fact that the settlement terms of the warrants and conversion feature of the Notes do not allow them to qualify for equity presentation. Accordingly, on October 19, 2009, in connection with the closing of the Offering, the convertible feature of the Notes were recorded as a derivative liability of approximately $6.1 million and the Series A and Series B warrants were recorded as a derivative liability of approximately $6.1 million each, respectively.

At the closing for the Offering, the fair value of the conversion feature, approximately $6.1 million, exceeded the proceeds of $3.25 million. The difference of approximately $2.9 million was charged to expense as the change in the fair market value of the conversion liability. Accordingly, the Company recorded an initial discount of $3.25 million equal to the face value of the Notes, which will be amortized over the three-year term, using the straight-line method.

At January 31, 2010, the Company accounted for the conversion feature using the fair value method, with the resultant gain recognition recorded in the statement of operations. At January 31, 2010, the fair value of the conversion feature liability was approximately $3.1 million, comprised of the $6.1 million recorded at the closing for the Offering and $3 million gain recorded to mark to market the liability at January 31, 2010. The conversion feature was valued at October 19, 2009 and January 31, 2010 using the Black-Scholes valuation model and the following assumptions:

	October 19, 2009	January 31, 2010
Volatility	126%	128.6%
Risk-free interest rate	1.50%	1.38%
Remaining contractual life (years)	3.0	2.72

At the closing, the Company recorded the Series A and Series B warrants as liabilities at their fair values of approximately $6.1 million each, based upon the Black-Scholes valuation model. The warrants will be accounted for using mark-to-market accounting and charged to the statement of operations in a manner similar to the conversion feature at each reporting date.

At January 31, 2010, the Company accounted for the warrant liabilities using the fair value method, with the resultant gain recognition recorded in the statement of operations. At January 31, 2010, the fair value of the Series A and Series B warrant liabilities were approximately $3.1 million and $3.2 million, respectively. The fair value of the Series A warrant is comprised of the 6.1 million recorded at the closing for the Offering and approximately $3 million gain recorded to mark to market the liability at January 31, 2010. The fair value of the Series B warrant is comprised of the $6.1 million recorded at the closing for the Offering and approximately $2.9 million gain recorded to mark to market the liability at January 31, 2010.

The Series A and Series B warrant liabilities were valued at October 19, 2009 and January 31, 2010 using the Black-Scholes valuation model and the following assumptions:

Series A Warrants		Series B Warrants	
October 19, 2009	January 31, 2010	October 19, 2009	January 31, 2010

Volatility	126%	128.63%	113.17%	113.82%
Risk-free interest rate	1.50%	1.38%	2.36%	2.34%
Remaining contractual life (years)	3.0	2.72	5.0	4.72

In addition, the Company evaluated the classification of all non-employee share commitments issued outside of the plans which existed prior to the Offering (the "Prior Non-Employee Commitments"). As a result, at October 19, 2009, the Company reclassified $747,235 from equity to liability for all Prior Non-Employee Commitments and has included this amount as a part of derivative liability. The Company marked to market the Prior Non-Employee Commitments at January 31, 2010 and recorded a gain of $578,913 for the change in fair value from October 19 to January 31, 2010. Once stockholders approve an increase in the amount of authorized shares to cover all existing share commitments, the marked-to-market liabilities for Prior Non-Employee Commitments will be reclassified to equity.

7. REVENUE RECOGNITION

The Company recognizes revenue in accordance with SAB No. 104, "Revenue Recognition" issued by the staff of the SEC. Under SAB 104, revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred and/or services have been rendered, the sales price is fixed or determinable, and collectability is reasonably assured.

The Company enters into marketing and distribution agreements, which contain multiple deliverables. The Company evaluates whether these deliverables constitute separate units of accounting to which total arrangement consideration is allocated. A deliverable qualifies as a separate unit of accounting when the item delivered to the customer has standalone value, there is objective and reliable evidence of fair value of items that have not been delivered to the customer and if there is a general right of return for the items delivered to the customer, delivery or performance of the undelivered items is considered probable and substantially in the control of the Company. Arrangement consideration is allocated to units of accounting on a relative fair-value basis or the residual method if the Company is unable to determine the fair value of all deliverables in the arrangement. Consideration allocated to a unit of accounting is limited to the amount that is not contingent upon future performance by the Company. Upon determination of separate units of accounting and allocated consideration, the general criteria for revenue recognition is applied to each unit of accounting.

In January 2008, the Company entered into a U.S. License Agreement for ONCONASE® with Par Pharmaceutical, Inc. ("Par"). Under the terms of the License Agreement, Strativa Pharmaceuticals ("Strativa"), the proprietary products division of Par, received exclusive marketing, sales and distribution rights to ONCONASE® for the treatment of cancer in the United States and its territories. The Company retained all rights and obligations for product manufacturing, clinical development and obtaining regulatory approvals, as well as all rights for those non-U.S. jurisdictions in which the Company has not currently granted any such rights or obligations to third parties. The Company received a cash payment of $5 million upon the signing of the License Agreement.

On September 8, 2009, the Company and Par entered into a Termination and Mutual Release Agreement (the "Termination Agreement") pursuant to which the Company's License Agreement and Supply Agreement with Par were terminated. The License Agreement was terminated and all rights under the license granted to Par revert back to the Company under the Termination Agreement. Under the Supply Agreement, the Company had agreed to supply all of Par's requirements for ONCONASE®. Pursuant to the Termination Agreement, Par will be entitled to a royalty of 2% of net sales of ONCONASE® or any other ranpirnase product developed by the Company for use in the treatment of cancer in the United States and its territories commencing with the first sale of such product and terminating upon the later to occur of the twelfth anniversary of the first sale and the date of expiration of the last valid claim of a pending application or issued patent owned or controlled by the Company with respect to such product.

The Company has evaluated both the License Agreement and the Termination Agreement and has determined that the Company is obligated to provide royalty payments in the event the Company has net sales. As such, as of January 31, 2010, the Company has not recognized into income any of the $5 million upfront payment received under the License Agreement.

8. COMMITMENTS

Employment and Retirement Agreements

Except as disclosed below, there have been no material changes with respect to the Company's employment and retirement agreements as disclosed in the "Notes to the Financial Statements – Commitments" in the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2009.

On April 28, 2008, the Company entered into a retirement agreement (the "Retirement Agreement") with Ms. Shogen. Under the terms of the Retirement Agreement, Ms. Shogen was entitled to receive her then current annual salary of $300,000 and participate in all benefit plans available for the Company's executives through her retirement date, which occurred on March 31, 2009 (the "Termination Date"). Ms. Shogen will receive retirement payments of $300,000 for each of the two years after the Termination Date. During the fiscal year ended July 31, 2008, the Company accrued these benefits in the amount of $612,000.

On September 14, 2009, the Company entered into an amendment (the "Amendment") to the Retirement Agreement amending certain terms. Pursuant to the Amendment, effective as of September 14, 2009, periodic payments owed to Ms. Shogen under the Retirement Agreement during the two year period commencing April 1, 2008 will be paid at the rate of $150,000 per year, rather than $300,000 per year as originally provided in the Retirement Agreement. Under the Retirement Agreement, Ms. Shogen was entitled to receive continuing payments equal to 15% of any royalties received by Alfacell pursuant to any and all license agreements entered into by Alfacell for the marketing and distribution of Licensed Products. Under the Amendment, the amount of such royalties related to net sales of Licensed Products to be received by Ms. Shogen has been reduced to 5%. Under the Retirement Agreement, Ms. Shogen was entitled to receive continuing payments equal to 5% of net sales of Licensed Products booked by Alfacell on its financial statements. Under the Amendment the amount of such net sales booked by Alfacell has been reduced to 2%. Under the Amendment, in the event Alfacell obtains marketing approval for ONCONASE® from the Food and Drug Administration or the European Medicines Agency, Ms. Shogen will be entitled to receive an additional payment equal to the difference between the periodic payments actually paid to Ms. Shogen during the two year period commencing April 1, 2008 and $600,000, the original amount of periodic payments to which Ms. Shogen was entitled under the Retirement Agreement. Such additional payment may be made by Alfacell, at its option, in cash, Alfacell common stock or a combination of both. The Amendment is binding on the parties as of September 14, 2009. Except as specifically amended in the Amendment, all terms and conditions of the Retirement Agreement remain in full force and effect.

On October 19, 2009, the Company entered into an Employment Agreement (the "Employment Agreement") with Mr. Muniz. Pursuant to the Employment Agreement, Mr. Muniz shall serve as the Company's President, Chief Executive Officer and Chief Financial Officer. Mr. Muniz will receive an annual base salary of $300,000 and is entitled to receive cash incentive compensation or annual stock option awards as determined by the Board or the Compensation Committee of the Board from time to time. In addition, Mr. Muniz is entitled to participate in any and all employee benefit plans established and maintained by the Company for executive officers of the Company. Pursuant to the Employment Agreement, Mr. Muniz received an option (the "Option"), granted under and in accordance with the Company's 2004 Stock Incentive Plan, to purchase an aggregate of 500,000 shares of Common Stock exercisable for ten years from the date the Option is granted. The Option shall vest in equal amounts on each of the first, second and third year anniversary of the grant so long as Mr. Muniz remains employed by the Company. The exercise price of the Option was equal to the fair market value of the Common Stock on the date of grant. The Employment Agreement continues in effect for two years following the date of the agreement and automatically renews for successive one-year periods, unless Mr. Muniz' employment is terminated by him or by the Company. In the event that Mr. Muniz's employment is terminated by the Company for any reason, then Mr. Muniz is entitled to receive his earned but unpaid base salary and incentive compensation, unpaid expense reimbursements, accrued but unused vacation and any vested benefits under any employee benefit plan of the Company. In the event that Mr. Muniz's employment is terminated by the Company without "cause" or by Mr. Muniz for "good reason" (as such terms are defined in the Employment Agreement), then in addition to the above mentioned payments and benefits, Mr. Muniz is entitled to receive an amount equal to his then current annual base salary, payable in equal installments over 12 months in accordance with the Company's payroll practice and all medical and health benefits for 18 months following the termination date. Mr. Muniz's Employment Agreementrequires him to refrain from competing with the Company and from hiring our employees and soliciting our customers for a period of one year following the termination of his employment with the Company for any reason.

Lease Commitments

Except as stated below, there have been no material changes with respect to the Company's operating leases as disclosed in the "Notes to the Financial Statements – Commitments" in the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2009.

On January 15, 2010, Charles Muniz, the Company's President and CEO, as an individual, entered into a quarterly lease agreement with I&G Garden State, LLC ("I&G") for office space at the fourth floor of 300 Atrium Drive, Somerset, NJ, which space the Company will occupy as its new office. The lease expires on March 31, 2010, renewable for successive three-month periods upon thirty days prior notice and payment of $15,790.50 for the following three months' rent. Since the beginning of the lease term, the Company has been paying the quarterly rent payments directly to I&G.

In January 2010, the Company vacated its old facility pursuant to the complaint filed by its landlord, I&G in November 2009. In February 2010, I&G withdrew the remaining balance of the Company's secured irrevocable letter of credit which was placed in March 2007 in the amount of approximately $81,000. On February 5, 2010, I&G commenced an action against the Company. The lawsuit seeks unspecified damages for an alleged breach of a lease agreement dated March 14, 2007 between the Company and I&G. The Company intends to vigorously defend this action.

9. CONTINGENCIES

The Company has product liability insurance coverage for clinical trials in the U.S. and in other countries where it conducts its clinical trials. No product liability claims have been filed against the Company. If a claim arises and the Company is found liable in an amount that significantly exceeds the policy limits, it may have a material adverse effect upon the financial condition and results of operations of the Company.

Except as disclosed below, there have been no material changes with respect to the Company's contingencies as disclosed in the "Notes to the Financial Statements – Contingencies" in the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2009.

On October 9, 2009, Robert Love, a former Chief Financial Officer and alleged shareholder of the Company, filed a complaint, Love v. Alfacell Corp. et al., Case No. 3:09-cv-05199-MLC-LHG (the "Complaint"), against the Company and certain of its current and former directors in the United States District Court, District of New Jersey, asserting violations of federal and state securities laws, direct and derivative common law claims for fraud and breach of fiduciary duty, and a direct claim for negligent misrepresentation in connection with the Company's Phase IIIb clinical trial for ONCONASE®. The Complaint alleges that the Company misled shareholders by issuing allegedly false projections of when the required number of patient deaths would occur in the Phase IIIb trial. The Complaint seeks compensatory damages of no less than $350,000, punitive damages of no less than $20 million, and an accounting and constructive trust. The Company believes that the claims are meritless and intends to defend the case vigorously.

I & G Garden State, LLC ("I&G") filed and served a complaint against the Company in the Superior Court of New Jersey Law Division, Special Civil Part Landlord-Tenant Section, Somerset County, on or about October 30, 2009, for non-payment of rent and failure to maintain security deposit. The complaint seeks to have the Company vacate the property. On November 13, 2009, the Company and I&G mutually agreed that the Company will vacate the property on or before December 31, 2009. In January 2010, the Company vacated the facility as per mutual agreement. In February 2010, I&G withdrew the remaining balance of the Company's secured irrevocable letter of credit which was placed in March 2007 in the amount of approximately $81,000. On February 5, 2010, I&G commenced an action against the Company. The lawsuit seeks unspecified damages for an alleged breach of a lease agreement dated March 14, 2007 between the Company and I&G. The Company intends to vigorously defend this action.

10. SALES

The Company was granted approval by the Swiss government to sell its product ONCONASE® on a named-patient basis. During the quarter ended October 31, 2009, the Company received gross proceeds of $18,750 from such sale.

11. RELATED PARTY TRANSACTIONS

On October 19, 2009, Charles Muniz, the Company's President, Chief Executive Officer and Chief Financial Officer, was a party to the Securities Purchase Agreement, the Investor Rights Agreement, the Security Agreement and the Escrow Agreement. The Company's entry into an employment agreement with Mr. Muniz upon terms reasonably acceptable to the investors in the Offering was a condition to the Closing. See Note 6 – Convertible Notes and Warrants.

12. SUBSEQUENT EVENT

As previously reported in the Company's Form 8-K filed with the SEC on February 10, 2010, the Company received $646,649 from the sale of its total available state tax benefit, which will be recognized as state tax benefit in the period it was received.

On February 5, 2010, the Company's former landlord, I&G, commenced an action against the Company. The lawsuit seeks unspecified damages for an alleged breach of a lease agreement dated March 14, 2007 between the Company and I&G. The Company intends to vigorously defend this action.

PART II - OTHER INFORMATION

Item 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth the various expenses expected to be incurred in connection with the sale and distribution of the securities being registered, all of which will be borne the Registrant (not including any underwriting discounts and commissions and expenses incurred by the Selling Security Holders for brokerage, accounting, tax, or legal services or any other expenses incurred by the Selling Security Holders in disposing of the shares). All amounts shown are estimates except the Securities and Exchange Commission registration fee.

Securities and Exchange registration fee	$	1,183.34
Legal fees and expenses	$	45,000
Accounting fees and expenses	$	18,000
Blue sky fees and expenses	$	5,000
Transfer Agent and Registrar fees and expenses	$	0
Miscellaneous	$	0
Total:	$	69,183.34

Item 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Under the General Corporation Law of Delaware a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), by reason of the fact that he or she is or was our director, officer, employee or agent, or is or was serving at our request against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to our best interests, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

In addition, the Delaware GCL also provides that we also may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in our right to procure a judgment in our favor by reason of the fact that he or she is or was our director, officer, employee or agent, or is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to our best interests. However, in such an action by or on our behalf, no indemnification may be made in respect of any claim, issue or matter as to which the person is adjudged liable to us unless and only to the extent that the court determines that, despite the adjudication of liability but in view of all the circumstances, the person is fairly and reasonably entitled to indemnity for such expenses which the court shall deem proper.

Our certificate of incorporation, as amended, is consistent with the Delaware GCL and our by-laws provide that each of our directors, officers, employees and agents shall be indemnified to the extent permitted by the Delaware GCL.

We have entered into indemnification agreements with each of our directors. The indemnity agreements are consistent with our by-laws and our policy to indemnify directors to the fullest extent permitted by law. The indemnity agreements provide for indemnification of directors for liabilities arising out of claims against such persons acting as our directors (or any entity controlling, controlled by or under common control with us) due to any actual or alleged breach of duty, neglect, error, misstatement, misleading statement, omission or other act done, or suffered or

wrongfully attempted by such directors, except as prohibited by law. The indemnity agreements also provide for the advancement of costs and expenses, including attorneys' fees, reasonably incurred by directors in defending or investigating any action, suit, proceeding or claim, subject to an undertaking by such directors to repay such amounts if it is ultimately determined that such directors are not entitled to indemnification. The indemnity agreements cover future acts and omissions of directors for which actions may be brought.

1

The indemnity agreements also provide that directors, officers, employees and agents are entitled to indemnification against all expenses (including attorneys' fees) reasonably incurred in seeking to collect an indemnity claim or to obtain advancement of expenses from us. The rights of directors under the indemnity agreements are not exclusive of any other rights directors may have under Delaware GCL, any liability insurance policies that may be obtained, our by-laws or otherwise. We would not be required to indemnify a director for any claim based upon the director gaining in fact a personal profit or advantage to which such director was not legally entitled, any claim for an accounting of profits made in connection with a violation of Section 16(b) of the Securities Exchange Act of 1934 or a similar state or common law provision or any claim brought about or contributed to by the dishonesty of the director.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered we will, unless in the opinion of our counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

Item 15. RECENT SALES OF UNREGISTERED SECURITIES

During the quarter ended January 31, 2007, we issued an aggregate total of 95,000 shares of common stock upon the exercise of warrants at an exercise price of $1.50 per share by unrelated parties, which resulted in gross proceeds of $142,500 to us. We have previously registered the resale of these shares by the stockholders on a Form S-3 registration statement. The above transactions with the unrelated parties, who we reasonably believed was accredited investors as such term is defined under Regulation D of the Securities had such knowledge and experience in financial and business matters that capable of evaluating the merits and risks of the prospective investment, were exempt from registration under Section 4(2) of the Securities Act. We did not engage in any public advertising or general solicitation in connection with the either the issuance or exercise of the above warrants. The net proceeds from these transactions were used for general corporate purposes.

During the quarter ended April 30, 2007, we issued an aggregate total of 206,500 shares of common stock upon the exercise of warrants at exercise prices ranging from $0.60 to $2.88 per share by unrelated parties, which resulted in gross proceeds of $228,720. We have previously registered the resale of these shares by the stockholders on a Form S-3 registration statement. The above transactions with the unrelated parties, who we reasonably believed was accredited investors as such term is defined under Regulation D of the Securities Act/had such knowledge and experience in financial and business matters that he was capable of evaluating the merits and risks of the prospective investment, were exempt from registration under Section 4(2) of the Securities Act. We did not engage in any public advertising or general solicitation in connection with the either the issuance or exercise of the above warrants. The net proceeds from these transactions were used for general corporate purposes.

In July 2007, in connection with a Distribution and Marketing Agreement with USP Pharma Spolka Z.O.O., an affiliate of US Pharmacia, we entered into a Securities Purchase Agreement with Unilab LP, an affiliate of US Pharmacia, pursuant to which we issued a total of 553,360 shares of restricted common stock for approximately $1.4 million, or $2.53 per share. The above transaction with the Unilab LP, who we reasonably believed was an accredited investor, was exempt from registration under Section 4(2) of the Securities Act. We did not engage in any public advertising or general solicitation in connection with the either the issuance or exercise of the above warrants. The net proceeds from these transactions were used for general corporate purposes.

During the quarter ended October 31, 2007, we issued 50,000 shares to Donna McCash Irrevocable Trust and 200,000 shares to McCash Family Limited Partnership upon the exercise of warrants at an exercise price of $0.60 per share, which resulted in gross proceeds of $150,000. We have previously registered the resale of these shares by the stockholders on a Form S-3 registration statement. The above transactions with Donna McCash Irrevocable Trust and McCash Family Limited Partnership, who are accredited investors as such term is defined under Regulation D of the Securities Act, were exempt from registrations under Section 4(2) of the Securities Act. We did not engage in any public advertising or general solicitation in connection with the issuance or exercise of the above warrants. The net proceeds from these transactions were used for general corporate purposes.

During the quarter ended January 31, 2008, we issued 200,000, 65,000 and 35,000 shares to McCash Family Limited Partnership, Donna McCash Irrevocable Trust and an unrelated private party, respectively, upon the exercise of warrants at an exercise price ranging from $0.60 to $1.00 per share, which resulted in gross proceeds of $194,000. We have previously registered the resale of these shares by the stockholders on a Form S-3 registration statement. The above transactions with the McCash Family Limited Partnership and Donna McCash Irrevocable Trust, who are accredited investors as such term is defined under Regulation D of the Securities Act, were exempt from registrations under Section 4(2) of the Securities Act. We did not engage in any public advertising or general solicitation in connection with the either the issuance or exercise of the above warrants. The net proceeds from these transactions were used for general corporate purposes.

During the quarter ended April 30, 2008, we issued 100,000 shares to McCash Revocable Trust upon the exercise of warrants at an exercise price of $0.60 per share, which resulted in gross proceeds of $60,000. This transaction was exempt from registrations under Section 4(2) of the Securities Act of 1933, as amended. We have previously registered the resale of these shares by the stockholders on a Form S-3 registration statement. We did not engage in any public advertising or general solicitation in connection with the either the issuance or exercise of the above warrants. The net proceeds from these transactions were used for general corporate purposes.

On October 19, 2009, we completed a sale of 65 Units in a private financing to certain investors pursuant to the Securities Purchase Agreement entered into on October 19, 2009. Each Unit consists of (i) $50,000 principal amount of Notes convertible into shares of the Company's common stock at a price of $0.15 per share, (ii) Series A Warrants to purchase in the aggregate that number of shares of common stock initially issuable upon conversion of the aggregate amount of the Notes issued as part of the Unit, at an exercise price of $0.15 per share with a three year term and (iii) Series B Warrants to purchase in the aggregate that number of shares of common stock initially issuable upon conversion of the aggregate amount of the Notes issued as part of the Unit, at an exercise price of $0.25 per share with a five year term. We received an aggregate of $3,250,000 in gross proceeds from the private financing. We did not engage in any public advertising or general solicitation in connection with the either the issuance or exercise of the above warrants. The securities were offered pursuant to the exemptions from registration set forth in section 4(2) of the Securities Act and Regulation D promulgated thereunder. The net proceeds from these transactions were used for general corporate purposes.

Item 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

The following exhibits are filed herewith or incorporated by reference into this Form S-1:

Exhibit No.	Item Title	Filed Herewith or Incorporated by Reference
3.1	Certificate of Incorporation, dated June 12, 1981 (incorporated by reference to Exhibit 3.1 to the Company's Registration Statement on Form S-1, File No. 333-112865, filed on February 17, 2004)	*
3.2	Amendment to Certificate of Incorporation, dated February 18, 1994 (incorporated by reference to Exhibit 3.2 to the Company's Registration Statement on Form S-1, File No. 333-112865, filed on February 17, 2004)	*
3.3	Amendment to Certificate of Incorporation, dated December 26, 1997 (incorporated by reference to Exhibit 3.3 to the Company's Registration Statement on Form S-1, File No. 333-112865, filed on February 17, 2004)	*
3.4	Amendment to Certificate of Incorporation, dated January 14, 2004 (incorporated by reference to Exhibit 3.4 to the Company's Registration Statement on Form S-1, File No. 333-112865, filed on February 17, 2004)	*

3.5	Certificate of Designation for Series A Preferred Stock, dated September 2, 2003 (incorporated by reference to Exhibit 3.5 to the Company's Registration Statement on Form S-1, File No. 333-112865, filed on February 17, 2004)	*

3.6	Certificate of Elimination of Series A Preferred Stock, dated February 3, 2004 (incorporated by reference to Exhibit 3.6 to the Company's Registration Statement on Form S-1, File No. 333-112865, filed on February 17, 2004)	*
3.7	Certificate of Amendment to Certificate of Incorporation, dated April 27, 2010 (incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K, filed on April 30, 2010)	*
3.8	By-Laws (incorporated by reference to Exhibit 3.4 to Registration Statement on Form S-1, File No. 333-111101, filed on December 11, 2003)	*
4.1	Form of 5% Senior Secured Convertible Promissory Notes dated October 19, 2009 (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on October 20, 2009)	*
4.2	Amendment to each 5% Senior Secured Convertible Promissory Notes dated February 26, 2010 by and among the Company and the holders thereof (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on March 4, 2010)	
4.3	Form of Series A Common Stock Purchase Warrant dated October 19, 2010 (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, filed on October 20, 2009)	*
4.4	Form of Series B Common Stock Purchase Warrant dated October 19, 2010 (incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K, filed on October 20, 2009)	*
5.1	Legality Opinion of Goodwin Procter LLP	+
10.1	1993 Stock Option Plan and Form of Option Agreement (incorporated by reference to Exhibit 10.10 to Registration Statement on Form SB-2, File No. 33-76950, filed on August 1, 1994)	*
10.2	1997 Stock Option Plan (incorporated by reference to Exhibit 10.2 to Registration Statement on Form S-1, File No. 333-111101, filed on December 11, 2003)	*
10.2.1	Amendment No. 1 to 1997 Stock Option Plan (incorporated by reference to Exhibit 10.2.1 to the Company's Quarterly Report on Form 10-Q, filed on June 9, 2008)	*
10.3	2004 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to the Company's Registration Statement on Form S-1, File No. 333-112865, filed on February 17, 2004)	*
10.3.1	Amendment No. 1 to 2004 Stock Incentive Plan (incorporated by reference to Exhibit 10.3.1 to the Company's Quarterly Report on Form 10-Q, filed on June 9, 2008)	*
10.4	Form of Subscription Agreement and Warrant Agreement used in Private Placements completed in February 2000 (incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K, filed on October 30, 2000)	*
10.5	Form of Subscription Agreement and Warrant Agreement used in the August and September 2000 Private Placements (incorporated by reference to Exhibit 10.24 to the Company's Quarterly Report on Form 10-Q, filed on December 15, 2000)	*
10.6	Form of Subscription Agreement and Warrant Agreement used in the April 2001 Private Placements (incorporated by reference to Exhibit 10.23 to Registration Statement on Form S-1, File No. 333-38136, filed on July 30, 2001)	*
10.7	Form of Convertible Note entered into in April 2001 (incorporated by reference to Exhibit 10.24 to Registration Statement on Form S-1, File No. 333-38136, filed on July 30, 2001)	*

4

10.8	Form of Subscription Agreement and Warrant Agreement used in the July 2001 Private Placements (incorporated by reference to Exhibit 10.25 to Registration Statement on Form S-1, File No. 333-38136, filed on July 30, 2001)	*
10.9	Form of Subscription Agreement and Warrant Agreement used in the August and October 2001 private placement (incorporated by reference to Exhibit 10.26 to Registration Statement on Form S-1, File No. 333-38136, filed on December 14, 2001)	*
10.10	Form of Subscription Agreement and Warrant Agreement used in the September 2001, November 2001 and January 2002 private placements (incorporated by reference to Exhibit 10.27 to Registration Statement on Form S-1, File No. 333-38136, filed on February 21, 2002)	*
10.11	Warrant issued in the February 2002 private placement (incorporated by reference to Exhibit 10.28 to Registration Statement on Form S-1, File No. 333-38136, filed on February 21, 2002)	*
10.12	Form of Subscription Agreement and Warrant Agreement used in the March 2002, April 2002 and May 2002 private placements (incorporated by reference to Exhibit 10.29 to Registration Statement on Form S-1, File No. 333-89166, filed on May 24, 2002)	*
10.13	Form of Subscription Agreement and Warrant Agreement used in the June 2002 and October 2002 private placements (incorporated by reference to Exhibit 10.30 to the Post-Effective Amendment to Registration Statement on Form S-1, File No. 333-38136, filed on March 3, 2003)	*
10.14	Form of Note Payable and Warrant Certificate entered into April, June, July, September, November and December 2002 (incorporated by reference to Exhibit 10.31 to the Post-Effective Amendment to Registration Statement on Form S-1, File No. 333-38136, filed on March 3, 2003)	*
10.15	Form of Note Payable and Warrant Certificate entered into November 2001, January, March and May 2003 (incorporated by reference to Exhibit 10.23 to the Company’s Annual Report on Form 10-K, filed on October 29, 2003)	*
10.16	Form of Subscription Agreement and Warrant Agreement used in the February 2003 and April through August 2003 private placements (incorporated by reference to Exhibit 10.24 to the Company’s Annual Report on Form 10-K, filed on October 29, 2003)	*
10.17	Form of Amended Notes Payable which amends the November 2001, April 2002, June 2002, July 2002, September 2002, November 2002 December 2002, January 2003, March 2003 and May 2003 notes payable (incorporated by reference to Exhibit 10.27 to The Company’s Annual Report on Form 10-K, filed on October 29, 2003)	*
10.18	Securities Purchase Agreement and Warrant Agreement used in September 2003 private placement and Form of Warrant Certificate issued on January 16, 2004 and January 29, 2004 to SF Capital Partners Ltd. (incorporated by reference to Exhibit 10.25 to the Company’s Annual Report on Form 10-K, filed on October 29, 2003)	*
10.19	Registration Rights Agreement used in September 2003 private placement with SF Capital Partners Ltd. (incorporated by reference to Exhibit 10.26 to the Company’s Annual Report on Form 10-K, filed on October 29, 2003)	*
10.20	Form of Securities Purchase Agreement used in May 2004 private placement with Knoll Capital Fund II, Europa International, Inc. and Clifford and Phyllis Kalista JTWROS (incorporated by reference to Exhibit 4.3 to Registration Statement on Form S-1, File No. 333-112865, filed on May 18, 2004)	*
10.21		*

Form of Registration Rights Agreement used in May 2004 private placement with Knoll Capital Fund II, Europa International, Inc. and Clifford and Phyllis Kalista JTWROS (incorporated by reference to Exhibit 4.4 to Registration Statement on Form S-1, File No. 333-112865, filed on May 18, 2004)

5

10.22	Form of Warrant Certificate issued on May 11, 2004 to Knoll Capital Fund II, Europa International, Inc. and Clifford and Phyllis Kalista JTWROS (incorporated by reference to Exhibit 4.5 to Registration Statement on Form S-1, File No. 333-112865, filed on May 18, 2004)	*
10.23	Form of Stock Option Agreement issued to the Company's Board of Directors under the Company's 1997 Stock Option Plan (incorporated by reference to Exhibit 10.23 to the Company's Quarterly Report on Form 10-Q filed on June 9, 2005)	*
10.24	Form of Stock Option Agreement issued to the Company's Executive Officers under the Company's 1997 Stock Option Plan (incorporated by reference to Exhibit 10.24 to the Company's Quarterly Report on Form 10-Q, filed on June 9, 2005)	*
10.25	Separation Agreement and General Release with Andrew Savadelis dated May 26, 2005 (incorporated by reference to Exhibit 10.25 to the Company's Annual Report on Form 10-K, filed on October 15, 2005)	*
10.26	Securities Purchase Agreement used in May 2005 private placement with Jeffrey D'Onofrio dated May 1, 2006 (incorporated by reference to Exhibit 10.26 to the Company's Annual Report on Form 10-K, filed on October 16, 2006)	*
10.27	Form of Warrant (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K, filed on July 19, 2006)	*
10.28	Registration Rights Agreement dated July 17, 2006 (incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K, filed on July 19, 2006)	*
10.29	Agreement to Amend Knoll Warrant dated July 17, 2006 (incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K, filed on July 19, 2006)	*
10.30	Form of Amended Knoll Warrant (incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K, filed on July 19, 2006)	*
10.31	Agreement to Amend SF Capital Warrant dated July 17, 2006 (incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K, filed on July 19, 2006)	*
10.32	Form of Amended Warrant for SF Capital Partners, Ltd. (incorporated by reference to Exhibit 4.6 to the Company's Current Report on Form 8-K, filed on July 19, 2006)	*
10.33	Securities Purchase Agreement dated July 17, 2006 (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on July 19, 2006)	*
10.34	Form of Stock Option Agreement for Executive Officers under the Company's 2004 Stock Incentive Plan (incorporated by reference to Exhibit 10.34 to the Company's Quarterly Report on Form 10-Q, filed on March 12, 2007)	*
10.35	Offer letter agreement with Lawrence A. Kenyon dated January 16, 2007 (incorporated by reference to Exhibit 10.35 to the Company's Quarterly Report on Form 10-Q, filed on March 12, 2007)	*
10.36	Summary of the Company's Non-Employee Director Compensation Policy (incorporated by reference to Exhibit 10.36 to the Company's Quarterly Report on Form 10-Q, filed on March 12, 2007)	*

10.37	Royalty Agreement between the Company and Kuslima Shogen, dated July 24, 1991 and Amendment to Royalty Agreement, dated April 16, 2001 (incorporated by reference to Exhibit 10.37 to the Company's Quarterly Report on Form 10-Q, filed on March 12, 2007)	*
10.38	Office Lease Agreement, dated March 14, 2007, between I&G Garden State, LLC and the Company (incorporated by reference to Exhibit 10.38 to the Company's Quarterly Report on Form 10-Q, filed on June 18, 2007)	*
10.39	Form of Distribution and Marketing Agreement, dated July 25, 2007, between the Company and USP Pharma Spolka Z.O.O. (incorporated by reference to Exhibit 10.39 to the Company's Quarterly Report on Form 10-Q, filed on October 15, 2007)	*^
10.40	Form of Securities Purchase Agreement, dated July 25, 2007, between the Company and Unilab LP. (incorporated by reference to Exhibit 10.40 to the Company's Quarterly Report on Form 10-Q, filed on October 15, 2007)	*
10.41	License Agreement, dated January 14, 2008, between the Company and Par Pharmaceutical, Inc. (incorporated by reference to Exhibit 10.41 to the Company's Quarterly Report on Form 10-Q, filed on March 7, 2008)	*^
10.42	Supply Agreement, dated January 14, 2008, between the Company and Par Pharmaceutical, Inc. (incorporated by reference to Exhibit 10.42 to the Company's Quarterly Report on Form 10-Q, filed on March 7, 2008)	*
10.43	Purchase and Supply Agreement, dated January 14, 2008, between the Company and Scientific Protein Laboratories LLC (incorporated by reference to Exhibit 10.43 to the Company's Quarterly Report on Form 10-Q, filed on March 7, 2008)	*
10.44	Amendment No. 1 to 1993 Stock Option Plan (incorporated by reference to Exhibit 10.44 to the Company's Quarterly Report on Form 10-Q, filed on June 9, 2008)	*
10.45	Retirement Agreement, dated April 25, 2008, between the Company and Kuslima Shogen (incorporated by reference to Exhibit 99.1 to the Company's Current Report on Form 8-K, filed on April 28, 2008)	*~
10.46	Securities Purchase Agreement dated October 19, 2009 by and among the Company and the investors named therein (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on October 20, 2009)	*
10.47	Amendment to Securities Purchase Agreement dated February 26, 2010 by and among the Company and the investors named therein (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K, filed on March 4, 2010)	*
10.48	Investors Rights Agreement dated October 19, 2009 by and among the Company and the investors named therein (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K, filed on October 20, 2009)	*
10.49	Amendment to Investor Rights Agreement dated February 26, 2010 by and among the Company and the investors named therein (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, filed on March 4, 2010)	*
10.50	Security Agreement dated October 19, 2009 by and among the Company, the agent named therein and the secured parties named therein (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K, filed on October 20, 2009)	*

10.51	Escrow Agreement by and among the Company and the parties named therein dated October 19, 2009 (incorporated by reference to Exhibit 10.4 to the Company's Current Report 8-K, filed on October 20, 2009)	*
10.52	Employment Agreement by and between the Company and Charles Muniz dated October 19, 2009 (incorporated by reference to Exhibit 10.5 to the Company's Current Report on Form 8-K, filed on October 20, 2009)	*~
10.53	Termination Agreement between the Company and Par Pharmaceutical, Inc. (incorporated by reference to Exhibit 10.51 to the Company's Quarterly Report on Form 10-Q, filed on November 13, 2009)	*
10.54	Amendment to the Retirement Agreement, dated April 25, 2008, between the Company and Kuslima Shogen (incorporated by reference to Exhibit 10.52 to the Company's Quarterly Report on Form 10-Q, filed on November 13, 2009)	*
21.1	Subsidiaries of Registrant (incorporated by reference to Exhibit 21. to the Company's Annual Report on Form 10-K, filed on October 16, 2006)	*
23.1	Consent of J.H. Cohn LLP	+
23.2	Consent of KPMG LLP	+
23.3	Consent of Goodwin Procter LLP (See Exhibit 5.1)	+

*	Previously filed; incorporated herein by reference
+	Filed herewith
^	Portions of this exhibit have been redacted and filed separately with the SEC pursuant to a confidential treatment request.
~	Management contract or compensatory plan or arrangement.

Item 17. UNDERTAKINGS

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933 (the “Securities Act”);

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) For the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities: The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

i. Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
ii. Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
iii. The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
iv. Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(5) For purposes of determining any liability under the Securities Act, if the registrant is subject to Rule 430C under the Securities Act, each prospectus filed pursuant to Rule 424(b) under the Securities Act as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B under the Securities Act or other than prospectuses filed in reliance on Rule 430A under the Securities Act, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no

statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(6) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(b) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURE

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Somerset, New Jersey, on April 30, 2010.

TAMIR BIOTECHNOLOGY, INC.

Dated: April 30, 2010 By: /s/ Charles Muniz
Charles Muniz
President, Chief Executive Officer
and Chief Financial Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints, Charles Muniz, as his attorney-in-fact, each with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and any and all Registration Statements filed pursuant to Rule 462 under the Securities Act of 1933, in connection with or related to the offering contemplated by this Registration Statement and its amendments, if any, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorney to any and all amendments to said Registration Statement.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

Dated: April 30, 2010 /s/ Charles Muniz
Charles Muniz, President, Chief Executive Officer, Chief Financial Officer and Director

Dated: April 30, 2010 /s/David Sidransky
David Sidransky, M.D., Director

Dated: April 30, 2010 /s/ John P. Brancaccio
John P. Brancaccio, Director

Dated: April 30, 2010 /s/Paul M. Weiss
Paul M. Weiss, Ph.D., Director