Fibrocell Science, Inc.
Form 10-K/A
June 02, 2014
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A

(Amendment No. 2)

x Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2013

OR

o Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Fibrocell Science, Inc.

(Exact name of registrant as specified in its Charter.)

Delaware	**001-31564**	**87-0458888**
(State or other jurisdiction of incorporation)	(Commission File Number)	(I.R.S. Employer Identification No.)

405 Eagleview Boulevard

Exton, Pennsylvania 19341

(Address of principal executive offices, including zip code)

(484) 713-6000

(Issuer s telephone number, including area code)

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

Title of Each Class	**Name of each exchange on which registered**
Common Stock, $.001 par value	NYSE MKT

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No x

Indicate by check mark whether the registrant: (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for any shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark if there is no disclosure of delinquent filers in response to Item 405 of Regulation S-K contained in this form, and no disclosure will be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

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

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

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

The approximate aggregate market value of common stock held by non-affiliates of the registrant was $87.2 million as of June 30, 2013, the last business day of the registrant s most recently completed second fiscal quarter. Such aggregate market value was computed by reference to the closing price of the common stock as reported on the NYSE MKT on June 30, 2013.

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes x No o

As of May 23, 2014, registrant had 40,856,815 shares issued and outstanding of common stock, par value $0.001.

DOCUMENTS INCORPORATED BY REFERENCE

None

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Explanatory Note

In this Annual Report on Form 10-K/A (Amendment No. 2) for the fiscal year ended December 31, 2013 (Annual Report), we are restating our previously issued and audited consolidated financial statements and the related disclosures for the years ended December 31, 2013, December 31, 2012 and December 31, 2011, all quarterly periods of 2013 and 2012 and the quarterly period ending September 30, 2011 (collectively, the Restated Periods). As discussed in further detail below and in Note 3 to the accompanying consolidated financial statements, the restatement is the result of a misapplication in the guidance on accounting for Warrants (as defined below). We assessed the impact of this misapplication on our prior interim and annual financial statements and concluded that the combined impact was material to these financial statements. Consequently, we have restated the prior period financial statements identified above. All amounts in this Annual Report affected by the restatement adjustments reflect such amounts as restated.

For a more detailed explanation of these matters and resulting restatements, please see Part II, Item 8: Financial Statements Note 3 and Note 8 to the Consolidated Financial Statements and Part II, Item 7: Management s Discussion and Analysis of Financial Condition and Results of Operations Restatement of Previously Issued Consolidated Financial Statements.

Background of Restatement

On May 6, 2014, the Audit Committee of the Company s Board of Directors (the Audit Committee), in connection with an internal review initiated by Company management, concluded that, because of a misapplication of the accounting guidance related to certain of the Company s warrants, the Company s previously issued consolidated financial statements for all periods beginning with the quarterly period ended September 30, 2011 through December 31, 2013 (collectively, the Affected Periods) should no longer be relied upon. As such, the Company is restating in this Annual Report its financial statements for the following periods: (i) the years ended December 31, 2013, December 31, 2012 and December 31, 2011, and (ii) all quarterly periods of 2013 and 2012, and (iii) the quarterly period ended September 30, 2011. However, these restatements result in non-cash, non-operating financial statement corrections and will have no impact on the Company s current or previously reported cash position, operating expenses or total operating, investing or financing cash flows, or net operating loss carryforward. The impact of such restatements on the first two quarters of 2011 and earlier was immaterial. The Company s December 31, 2010 opening balances were adjusted to reflect the cumulative impact of these restatements as a decrease in additional paid-in capital of $3.4 million and an increase in accumulated deficit of $1.2 million, for a total change to stockholders deficit of $4.6 million.

The warrants at issue (collectively, the Warrants) consist of the following as of December 31, 2013:

1. warrants to purchase an aggregate of 15,080 shares of common stock, issued on October 13, 2009 at an exercise price of $6.25 per share issued to placement agents;

2. Series A, class A warrants to purchase 115,440 shares of common stock, issued on October 13, 2009 at an exercise price of $6.25 per share;

3. Series A, class B warrants to purchase 130,004 shares of common stock, issued on October 13, 2009 at an exercise price of $6.25 per share;

4. warrants to purchase an aggregate of 393,416 shares of common stock, issued on March 4, 2010 at an exercise price of $6.25 per share;

5. warrants to purchase 6,113 shares of common stock, issued on June 16, 2011 at an exercise price of $22.50 per share issued to placement agents;

6. warrants to purchase 50,123 shares of common stock, issued on August 22, 2011 at an exercise price of $13.635 per share issued to placement agents;

7. warrants to purchase 565,759 shares of common stock, issued on August 22, 2011 at an exercise price of $18.75 per share;

8. warrants to purchase an aggregate of 1,125,578 shares of common stock, issued on June 1, 2012 at an exercise price of $2.50 per share;

9. warrants to purchase an aggregate of 1,217,816 shares of common stock, issued on various dates in 2010 and 2011 at an exercise price of $6.25 per share;

10. warrants to purchase an aggregate of 1,568,823 shares of common stock, issued on various dates in 2012 at an exercise price of $7.50; and

11. warrants to purchase an aggregate of 768,778 shares of common stock, issued on various dates in 2010 at an exercise price of $6.25.

The above warrant shares and exercise prices have been retroactively adjusted to reflect the April 30, 2013 reverse stock split.

Of the Warrants, approximately 5,335,000 were originally and correctly classified as liabilities on the Company s balance sheets. In connection with the Company s October 2012 financing and a contemporaneous modification of those Warrants to remove down-round anti-dilution protection, such Warrants were erroneously reclassified as a component of equity as opposed to liabilities on the Consolidated Balance Sheets. The corresponding Consolidated Statements of Operations did not include the subsequent non-cash changes in the estimated fair value of such Warrants. Those Warrants, however, continued to contain a cash settlement feature regarding fundamental transactions that allowed those Warrant holders to have a different settlement option than the Company s stockholders upon certain fundamental transactions,

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including a change of control of the Company, thereby precluding equity treatment for the Warrants. In the course of management s investigation, the Company also reviewed the Warrant agreements for approximately 622,000 Warrants that were originally classified as equity instruments upon their issuance. Those Warrants contained a similar fundamental transaction settlement provision that precluded equity treatment for such Warrants.

Based on Accounting Standards Codification 815, *Derivatives and Hedging* (ASC 815), warrant instruments that could potentially require net cash settlement in the absence of express language precluding such settlement and those which include down-round provisions should be initially classified as derivative liabilities at their estimated fair values, regardless of the likelihood that such instruments will ever be settled in cash. In periods subsequent to issuance, changes in the estimated fair value of the derivative instruments should be reported in the statement of operations. The Audit Committee, together with management, determined that the financial statements in the Affected Periods should be restated to reflect the Warrants as liabilities, with subsequent changes in their estimated fair value recorded as non-cash income or expense in each Affected Period.

The cumulative effect of these adjustments on our financial statements is a 15.2% decrease in the accumulated deficit in the amount of approximately $15.6 million as of December 31, 2013. The restatement had no impact on net cash flows from operating, investing or financing activities as the adjustments resulting from the non-cash change in the fair value of the warrant liability for each period and the statements of operations only impacted net loss from continuing operations. In addition to the restatement noted above, the Consolidated Statements of Operations and the Consolidated Balance Sheets have also been retroactively adjusted to give effect to the Company s April 2013 reverse stock split. An explanation of the impact on our financial statements is contained in Note 3 to the consolidated financial statements contained in Part II, Item 8: Financial Statements.

Items Amended in this Annual Report on Form 10-K/A

The following items of this Annual Report on Form-10K/A include restated financial data: (i) Part II, Item 6: Selected Financial Data, (ii) Part II, Item 7: Management s Discussion and Analysis of Financial Condition and Results of Operations; and (iii) Part II, Item 8: Financial Statements. The following items of this Annual Report on Form 10-K/A also include amendments due to this restatement: (i) Part I, Item 1A. Risk Factors and (ii) Part II, Item 9A. Controls and Procedures.

Restatement of Other Financial Statements

The Company has concurrently included (i) restated financial information for the years ended December 31, 2013, December 31, 2012 and December 31, 2011 (ii) restated condensed financial information for the quarterly periods in 2013 and 2012 and (iii) restated condensed financial information for the quarterly period ending September 30, 2011 in the Company s Amendment No. 2 on Form 10-K/A for the year ended December 31, 2013 (the Amended 2013 10-K/A). The impact of such restatements on the first two quarters of 2011 and earlier was immaterial. The Company s December 31, 2010 opening balances were adjusted to reflect the cumulative impact of these restatements as a decrease in additional paid-in capital of $3.4 million and an increase in accumulated deficit of $1.2 million, for a total change to stockholders deficit of $4.6 million. As all material restatement information will be included in this Amended 10-K/A, the Company does not intend to amend any of its other previously filed Annual Reports on Form 10-K or Quarterly Reports on Form 10-Q.

Internal Control Considerations

Management has assessed the effect of the restatement on the Company s internal control over financial reporting and believes that this restatement represents a material weakness in its internal control over financial reporting for all periods under restatement. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the annual or interim consolidated financial statements will not be prevented or detected on a timely basis. For a discussion of management s consideration of the material weakness identified, see Part II, Item 9A: Controls and Procedures included in this Annual Report.

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Forward-Looking Statements

This Annual Report on Form 10-K/A (including the section regarding Management s Discussion and Analysis of Financial Condition and Results of Operations) contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, as well as information relating to Fibrocell Science, Inc. and its subsidiaries (referred to as Fibrocell, Company, we, or our) that is based on management s exercise of business judgment and assumptions made by and information currently available to management. Although forward-looking statements in this Annual Report on Form 10-K/A reflect the good faith judgment of our management, such statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks and uncertainties and actual results and outcomes may differ materially from the results and outcomes discussed in or anticipated by the forward-looking statements. When used in this document and other documents, releases and reports released by us, the words anticipate, believe, estimate, expect, intend, the facts suggest and words of similar import, are inten identify any forward-looking statements. You should not place undue reliance on these forward-looking statements. These statements reflect our current view of future events and are subject to certain risks and uncertainties as noted below. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, our actual results could differ materially from those anticipated in these forward-looking statements. Actual events, transactions and results may materially differ from the anticipated events, transactions or results described in such statements. Although we believe that our expectations are based on reasonable assumptions, we can give no assurance that our expectations will materialize. Many factors could cause actual results to differ materially from our forward looking statements including those set forth in Item 1A of this report. Other unknown, unidentified or unpredictable factors could materially and adversely impact our future results. We undertake no obligation and do not intend to update, revise or otherwise publicly release any revisions to our forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of any unanticipated events. Several of these factors include, without limitation:

- whether our clinical human trials relating to the use of autologous cell therapy applications, in particular, for restrictive burn scars, vocal cord scars and genetically-modified orphan indications, and such other indications as we may identify and pursue can be conducted within the timeframe that we expect, whether such trials will yield positive results, or whether additional applications for the commercialization of autologous cell therapy can be identified by us and advanced into human clinical trials;

- our ability to meet requisite regulations or receive regulatory approvals in the United States, our ability to retain any regulatory approvals that we may obtain and the absence of adverse regulatory developments in the United States;

- our dependence on one facility in Exton, Pennsylvania for our research, development and manufacturing operations, and the potential that such facility is damaged or if we are otherwise required to discontinue production at such facility;

- new entrance of competitive products or further penetration of existing products in our markets;

- the effect on us from adverse publicity related to our products or the company itself;

- any adverse claims relating to our intellectual property; and

- our dependence on physicians to correctly follow our established protocols for the safe and optimal administration of our product.

Our corporate headquarters is located at 405 Eagleview Boulevard, Exton, Pennsylvania 19341. Our phone number is (484) 713-6000. Our fiscal year begins on January 1, and ends on December 31, and any references herein to Fiscal 2013 mean the year ended December 31, 2013, and references to other Fiscal years mean the year ending December 31, of the year indicated.

We own or have rights to various copyrights, trademarks and trade names used in our business including but not limited to the following: Fibrocell Science, Fibrocell Therapy, Fibrocell Process and LAVIV®. This report also includes other trademarks, service marks and trade names of other companies. Other trademarks and trade names appearing in this report are the property of the holder of such trademarks and trade names.

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We obtained statistical data, market data and other industry data and forecasts used in this Form 10-K/A from publicly available information. While we believe that the statistical data, industry data, forecasts and market research are reliable, we have not independently verified the data, and we do not make any representation as to the accuracy of that information.

Part I

Item 1. Business

Overview

We are an autologous cell therapy company primarily focused on developing first-in-class treatments for skin diseases and conditions with high unmet medical needs. Based on our proprietary autologous fibroblast technology, we are pursuing breakthrough medical applications of azficel-T for restrictive burn scarring and vocal cord scarring.

Fibroblasts are the most common cell located in skin and connective tissue and are responsible for synthesizing extracellular matrix proteins that provide cellular structure and support. Fibroblasts are targeted to the localized environment of skin and connective tissue. Rare and serious skin and connective tissue conditions and diseases represent an ideal therapeutic focus for Fibrocell s autologous fibroblast technology. Such diseases are typically difficult to treat with systemic drug therapies because blood flow is limited in skin and connective tissue. Therefore, a localized approach is an optimum choice for treating these debilitating conditions in skin and connective tissue.

Driving Fibrocell s innovative therapies is its Personalized Biologics platform, which embraces two product engines: the Azficel-T Autologous Fibroblast Product Engine and the Protein Expression Product Engine. With these two product engines, Fibrocell plans to harness the favorable characteristics of fibroblasts to develop new therapies for diseases and conditions of the skin and connective tissues where there are limited or no treatment options. The Azficel-T Autologous Fibroblast Product Engine is developing biologic solutions for the treatment of serious and debilitating scarring conditions. The Protein Expression Product Engine is creating biologic products by genetically modifying fibroblasts to express target proteins that are inactive or missing from patients with rare genetic skin and tissue disorders.

Our collaboration with Intrexon Corporation (NYSE:XON), a leader in synthetic biology, includes using genetically-modified fibroblasts for treating orphan skin diseases for which there are no currently approved products and exploring the localized treatment of the most common autoimmune skin disease, moderate-to-severe psoriasis. This collaboration with Intrexon is discussed in more detail below. Additional collaborations with the University of California, Los Angeles (UCLA) and the Massachusetts Institute of Technology (MIT) focus on skin-derived stem cells.

We made the strategic decision in 2013 to change our business strategy to focus on label-expansion medical indications for azficel-T and on rare skin and connective tissue diseases in collaboration with our partner Intrexon. As a result, we have reduced sales and marketing efforts of the LAVIV® aesthetic product line. We performed a nominal amount of LAVIV® aesthetic procedures in 2013 and will continue to do so in 2014.

Our Strategy

Fibrocell s personalized biologics approach represents a new dimension to the field of cell therapy and regenerative medicine, aimed at treating the underlying cause of disease by extracting cells from skin to create localized therapies that are compatible with the unique biology of each patient.

Currently, Fibrocell s Personalized Biologics platform embodies two separate product engines, each of which uses our proprietary fibroblast technology.

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Fibrocell Proprietary Personalized Biologics Approach:

Harnessing Autologous Fibroblast Cells to Deliver Localized Therapies That Are Compatible with Each Patient s Unique Biology

The fibroblast cells that are the foundation of our azficel-T product platforms are generated by our patented manufacturing process begin with the collection of three small (3 mm) skin samples from behind the ear on the patient s skin. The biopsies are then sent to us for processing according to FDA pharmaceutical standards (current Good Manufacturing Practices, cGMP). The skin samples are treated with an enzymatic process designed to separate the tissue into its individual component cells by breaking down the extracellular matrix holding the cells in place. The cells are simultaneously treated with antibiotics to prevent extraneous infection by microorganisms. The cells are then expanded using classical tissue culture techniques until the numbers are adequate for repeated injection. The patient s cells are frozen and stored until the time of injection. When an injection is needed, the cells are thawed and washed to prepare them for patient injection. Within 24 hours of this preparation and shipment, 10 million to 20 million cells arrive at the doctor s office, ready for intradermal injection of the patient.

The Azficel-T Autologous Fibroblast Product Engine utilizes autologous fibroblast cells to treat scarring conditions. Fibrocell is expanding medical applications of azficel-T to create therapeutics comprised of fibroblast cells, which can treat conditions based on the inherent characteristics of the fibroblast. Azficel-T is FDA approved through a biologic license application (BLA). We initially introduced azficel-T as an aesthetics product, but have shifted its focus to serious skin and connective tissue conditions. Currently, we are conducting clinical studies for azficel-T product indications for Restrictive Burn Scarring and Vocal Cord Scarring. With these conditions, the autologous fibroblast cell offers a new therapeutic approach.

Fibrocell s Azficel-T Autologous Fibroblast Product Engine offers the potential for future therapeutic applications that employ fibroblast technology to target diseases with unmet medical needs.

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Fibrocell is conducting research and development with UCLA. An autologous fibroblast program for targeted protein therapeutics is a preclinical program in collaboration with UCLA for developing a fibroblast personalized biologic with bone morphogenetic protein 2 (BMP-2) for bone repair.

In addition, UCLA has discovered a media supplement that contributes to the genomic stability of induced pluripotent stem cells (iPSC) while growing in culture. Issues common to genomic stability with iPSC culture has prevented significant advance into clinical trials. This media supplement may allow for the advance in this technology.

Under a collaborative agreement with MIT, university researchers are developing a scalable method to cost effectively culture and grow the cell types identified by UCLA into clinically relevant quantities

Our Protein Expression Product Engine combines its autologous fibroblast technology with the synthetic biology expertise of its collaborator, Intrexon, to develop genetically-modified personalized biologics therapies for orphan skin diseases. The integration of Fibrocell s Azficel-T Autologous Fibroblast Product Engine and Intrexon s UltraVector® technology enables the development of genetically-modified personalized biologics to address the fundamental source of serious and rare skin diseases that have unmet medical needs.

The Protein Expression Product Engine brings several distinct advantages to Fibrocell s pursuit of therapies for serious and rare skin diseases.

- Intrexon s UltraVector® technology is designed to facilitate the assembly and delivery of the necessary target gene constructs for delivery to autologous fibroblasts. Access to this platform allows Fibrocell a rapid method to screen and construct the best genetic therapeutic solutions for rare and serious skin diseases.

- In certain therapeutic applications with the Protein Expression Product Engine, Fibrocell will also deploy Intrexon s proprietary RheoSwitch Therapeutic System® technology**,** which is a biologic switch activated by a small molecule ligand that provides the ability to control level and timing of protein expression in those diseases where such control is critical.

Clinical and Pre-Clinical Development Programs

Our clinical development programs are focused on the medical market where there are unmet needs. These programs are supported by a number of clinical trial programs at various stages of development. Our medical development programs are designed to treat restrictive burn scars, vocal cord scarring and genetically-modified indications, for example recessive dystrophic epidermolysis bullosa. All our product candidates are non-surgical and minimally invasive.

Our clinical and medical development programs consist of the following:

Program	Indication	Status
azficel-T sBLA	Restrictive Burn Scarring	Phase II Clinical Trial
azficel-T sBLA	Vocal Cord Scarring	Phase II Clinical Trial
Rare Disease	Recessive Dystrophic Epidermolysis Bullosa (RDEB)	Pre-Clinical
Rare Disease	Morphea Profunda / Linear Scleroderma	Pre-Clinical
Rare Disease	Cutaneous Eosinophilias	Pre-Clinical
Rare Disease	Ehlers-Danlos Hypermobility Type (Tenascin-X Deficiency)	Pre-Clinical

Restrictive Burn Scarring *Phase II Trial:* According to the American Burn Association, 40,000 people are hospitalized each year with severe burns in the United States. These patients are often left with restrictive burn scars that decrease mobility and cause continuous pain. We have initiated a Phase II trial of azficel-T for the treatment of restrictive burn scars and have begun enrolling patients. This trial will evaluate the use of azficel-T to

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improve range of motion, function and flexibility, among other parameters, in existing restrictive burn scars in approximately 20 to 30 patients.

The Phase II study was based on previous safety experience with azficel-T and a number of case reports. These case reports from the United Kingdom (UK) used azficel-T for burn scars and wounds with no adverse effects. These anecdotal cases suggest that azficel-T may provide an alternative to skin grafts which leave a significant cosmetic and sometimes functional deformity.

Vocal Cord Scarring Phase II Trial: The exact incidence of vocal cord scaring is difficult to determine. However, it can be interpreted from various studies by Cohen, 2010; Poels et al, 2003; Dailey et al, 2007; Painter, 1990 that the incidence of vocal cord scarring is in the range of 200,000 to 700,000 in the Unites States. We have initiated a Phase II clinical study on vocal cord scarring and have begun enrolling patients.

One clinical study has been conducted to evaluate the efficacy and safety of azficel-T for the treatment of vocal fold scarring in subjects who had failed to improve following anti-reflux regimen, speech therapy, or vocal fold injection with collagen. In Phase 1 study IT-V-001 entitled A Phase 1 Feasibility Study to Determine the Safety and Effects of Isolagen Injections for the treatment of Vocal Fold Scarring, 5 subjects received 3 doses (1-2 x 107 cells/mL per treatment) of azficel-T per vocal fold in the lamina propia compartment, where each treatment was approximately 1 month apart. Starting in Month 3, a sustained improvement was noted through Month 12 in the mucosal wave grade, voice handicap index, and subject-assessed voice quality.

Three of the 5 subjects reported a total of 16 adverse events (AE). All reported AEs other than ear pain (12 events in 3 subjects) were considered by the Investigator to be unrelated to treatment. A majority of the cases (10) were mild or moderate in severity. All AEs were non-serious and no deaths were reported. There were no laboratory abnormalities or other untoward events that were considered related to the study treatment. Based on these results, azficel-T was well tolerated in this subject population.

Recessive Dystrophic Epidermolysis Bullosa Preclinical: Through our collaboration with Intrexon, we are exploring the use of genetically-modified fibroblast cells to treat patients with collagen deficient diseases. We are working to genetically modify fibroblasts with the gene to produce collagen VII to treat patients with recessive dystrophic epidermolysis bullosa (RDEB). This product concept utilizes genetically-modified fibroblasts to up-regulate and produce collagen VII in a controlled manner for localized or systematic treatment of RDEB. We are collaborating with Intrexon to employ Intrexon s synthetic biology platforms for optimal gene expression from genetically-modified fibroblasts. RDEB is the most severe form of Epidermolysis Bullosa (EB), a devastatingly debilitating genetic disorder that causes severe blistering and areas of missing skin, which is a response to any kind of friction, including normal daily occurrences like rubbing or scratching. The current RDEB patient population in the U.S. is approximately 2,800 to 5,600 patients.

Autoimmune Disorders Pre-Clinical: We expanded our agreement with Intrexon to broaden the existing collaboration to include potential treatments based on engineered autologous fibroblast cells for the localized treatment of autoimmune and inflammatory disorders including morphea profunda / linear scleroderma, cutaneous eosinophilias and moderate to severe psoriasis. Intrexon plans to engineer transgenes to optimize the functionality of Fibrocell s autologous fibroblast cells in order to produce factors under the control of its proprietary RheoSwitch Therapeutic System® (RTS®) that will modulate immune and inflammatory pathways. Morphea profunda/ linear scleroderma is an autoimmune disease that primarily affects skin and connective tissues causing hardened plaques and joint contractures. The total prevalence of morphea profunda / linear scleroderma in the United States is estimated to be approximately 10,000 patients with similar prevalence in Europe and Asia. Cutaneous eosinophilias are inflammatory diseases that manifest in dermal and subcutaneous layers including the fascia. Similar to morphea profunda / linear scleroderma, plaques and connective tissue contractures form and persist on a chronic basis. The prevalence of cutaneous eosinophilias in the United States is estimated to be approximately 4,000 patients with similar prevalence in Europe and Asia respectively. In aggregate, approximately 40,000 patients worldwide suffer from morphea profunda and the cutaneous eosinophilias each year.

Psoriasis is an immune-mediated, chronic skin disease that is characterized by the overproduction of new skin cells, which results in the formation of scaly patches. The total prevalence of psoriasis in the United States is estimated to be greater than 4.5 million patients, of which approximately twenty five percent are patients with moderate to severe disease, the indication targeted by Fibrocell s new therapeutic program. Current treatment options for patients with moderate to severe psoriasis include phototherapy (light- or laser-based treatments) or systemic therapies such as immunosuppressant and biologic therapies, which have varying degrees of effectiveness and potential adverse side effects.

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Ehlers-Danlos Syndrome - Hypermobility Type Pre-Clinical: We expanded our agreement with Intrexon to explore the treatment of Ehlers-Danlos Syndrome Hypermobility Type (EDS-HT). We are exploring the use of genetically-modified engineer autologous fibroblast cells genetically corrected to produce tenascin-X (TN-X), a protein that is deficient in the connective tissue of a subset of EDS-HT patients. Patients with EDS-HT often experience significant musculoskeletal complications, including frequent joint dislocations, subluxations and early onset osteoarthritis. The goal is to employ the TN-X-expressing cells in the clinic, where they would be injected into EDS-HT patients at the disease sites most likely lower limbs like knees, hips and feet, as well as the jaw to correct connective tissue malfunction caused by deficient TN-X expression. There are approximately 2,000 to 6,000 patients with this disease in the U.S.

Intrexon Collaboration

On October 5, 2012, we entered into an Exclusive Channel Collaboration Agreement (Channel Agreement) with Intrexon that governs a channel collaboration arrangement. The Channel Agreement grants us an exclusive license to use proprietary technologies and other intellectual property of Intrexon to develop and commercialize certain products in the United States. Through the original collaboration with Intrexon, we are exploring the use of genetically-modified fibroblast cells to treat patients with collagen deficient diseases. We are working to genetically modify fibroblasts with the gene to produce collagen VII to treat patients with recessive dystrophic epidermolysis bullosa. This development concept utilizes genetically-modified fibroblasts to up-regulate and produce collagen VII in a controlled manner for localized or systematic treatment of RDEB.

On June 28, 2013, we and Intrexon entered into a First Amendment (Amendment) to the parties Channel Agreement. The Amendment broadens the existing collaboration to include potential treatments based on engineered autologous fibroblast cells for the localized treatment of autoimmune and inflammatory disorders including morphea profunda / linear scleroderma, cutaneous eosinophilias and moderate to severe psoriasis.

On January 10, 2014, we and Intrexon entered into a Second Amendment (the Second Amendment) to the parties Channel Agreement dated October 5, 2012, as previously amended on June 28, 2013 (the Channel Agreement and such previous amendment, the First Amendment). The Channel Agreement provides for a channel collaboration arrangement governing a strategic collaboration for the development and commercialization of genetically-modified and non-genetically-modified autologous fibroblasts and autologous dermal cells in the United States.

The Channel Agreement originally granted us an exclusive license to use proprietary technologies and other intellectual property of Intrexon to research, develop, use, import, export, make, have made, sell, and offer for sale certain products in the Field in the United States. The Field in the Channel Agreement originally included: (a) the enhanced production and purification of non-genetically-modified autologous fibroblasts for all aesthetic and therapeutic indications; (b) the enhanced production and purification of non-genetically-modified autologous dermal cells for aesthetic and therapeutic treatment of dermal, vocal cord, and periodontal indications; (c) the development of genetically-modified autologous fibroblasts for all aesthetic and therapeutic indications; and (d) the development of genetically-modified autologous dermal cells for aesthetic and therapeutic treatment of dermal, vocal cord, and periodontal indications. Pursuant to the First Amendment executed on June 28, 2013, the Field in the Channel Agreement was amended to add autologous human fibroblasts genetically-modified to express a therapeutic protein and/or bioactive RNA for the treatment of autoimmune and non-infectious inflammatory disorders that manifest in cutaneous tissues, fascia and/or muscle. Pursuant to the Second Amendment executed on January 10, 2014, the Field in the Channel Agreement was further amended to add autologous human fibroblasts genetically-modified to express bioactive Tenascin-X locally to correct connective tissue disorders. The remainder of the Channel Agreement was unchanged and the terms of the Channel Agreement will apply to the amended Field.

Pursuant to the Channel Agreement and Amendments, we engage Intrexon for support services for the development of new products covered under the Channel Agreement and Amendments, and reimburse Intrexon for its fully-loaded cost for time and materials for transgenes, cell processing, or other work performed by Intrexon for such research and development. We will pay quarterly cash royalties on improved products equal to one third of cost of goods sold savings less any such savings developed by us outside of the Channel Agreement or Amendments. On all other developed products, we will pay Intrexon quarterly cash royalties of 7% on aggregate annualized net sales up to $100 million, and 14% on aggregate annualized net sales greater than $100 million. Sales

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from our products (including new indications) that we are marketing at the time of the Channel Agreement are not subject to royalty payments unless they are improved upon through the Channel Agreement.

License Agreements

On May 3, 2012, the Company entered into an exclusive license agreement with The Regents of the University of California, under which the Company acquired the rights to commercially apply discoveries resulting from the scientific collaboration between the University of California, Los Angeles (UCLA) and Fibrocell Science, Inc. Under the terms of the license agreement, the Company agreed to pay UCLA a non-refundable initial license fee of $10,000 thirty days post execution of the agreement and the Company also agreed to pay UCLA an annual license maintenance fee of a percentage of product royalties, and milestone payments based on our achievement of certain clinical and regulatory related milestones for these rights. The Company s ability to meet the milestones is dependent on a number of factors including final approvals by regulatory agencies and the continued enforceability of patent claims.

On May 3, 2012, the Company also entered into a sponsored research agreement with the Massachusetts Institute of Technology (MIT) to progress the research currently underway at UCLA above. Under the agreement, MIT researchers will investigate viable techniques to isolate, separate, and expand subpopulations of mesenchymal stem cells from dermal cell populations. The goal is to produce relevant quantities of the cells and performs ex vivo studies to determine the ability of these cells to produce clinically meaningful outcomes, such as bone production. If successful, in vivo studies will be evaluated for safety and efficacy analysis. The agreement is currently scheduled to terminate in September 2015

Manufacturing

We currently have one manufacturing facility located in Exton, Pennsylvania. All component parts used in our Exton, Pennsylvania manufacturing process are readily available with short lead times, and all machinery is maintained and calibrated. We believe we currently have adequate manufacturing capacity to clinical demand, as well as the limited commercial demand we expect during 2014.

The fibroblast cells that are the foundation of our azficel-T product platforms are generated by our patented manufacturing process begin with the collection of three small (3 mm) skin samples from behind the ear on the patient s skin. The biopsies are then sent to us for processing according to FDA pharmaceutical standards (current Good Manufacturing Practices, cGMP). The skin samples are treated with an enzymatic process designed to separate the tissue into its individual component cells by breaking down the extracellular matrix holding the cells in place. The cells are simultaneously treated with antibiotics to prevent extraneous infection by microorganisms. The cells are then expanded using classical tissue culture techniques until the numbers are adequate for repeated injection. The patient s cells are frozen and stored until the time of injection. When an injection is needed, the cells are thawed and washed to prepare them for patient injection. Within 24 hours of this preparation and shipment, 10 million to 20 million cells arrive at the doctor s office, ready for intradermal injection of the patient.

Intellectual Property

We believe that patents, trademarks, copyrights and other proprietary rights are important to our business. We also rely on trade secrets, know-how and continuing technological innovations to develop and maintain our competitive position. We seek to protect our intellectual property rights by a variety of means, including obtaining patents, maintaining trade secrets and proprietary know-how, and technological innovation to operate, without infringing on the proprietary rights of others and to prevent others from infringing on our proprietary rights. Our policy is to seek to protect our proprietary position by, among other methods, actively seeking patent protection in the United States and certain foreign countries.

As of December 31, 2013, we had 12 issued U.S. patents, 8 pending U.S. patent applications, 3 pending international patents, 28 granted foreign patents and 15 pending foreign patent applications. Our issued patents and patent applications primarily cover the method of using autologous cell fibroblasts for the repair of skin and soft tissue defects and the use of autologous fibroblast cells for tissue regeneration. In particular, we own issued patents in the

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U.S. and other countries that are directed to methods of long-term augmentation of subcutaneous or dermal tissue by injecting an effective amount of a suspension of autologous passaged dermal fibroblasts into subadjacent tissue, which covers the approved use of LAVIV, as well as azficel-T for the treatment of restrictive burn scars and vocal cord scars, and which naturally expire in July 2015. We are currently applying for the maximum 5 year extension of this patent term in the U.S. In addition, we own an issued U.S. patent and pending applications in Australia, Canada, China, Europe, India, Japan, South Korea and the U.S. directed to frozen dosage formulations for injection containing particular amounts of autologous human fibroblasts and uses thereof, which also covers LAVIV as well as azficel-T for the treatment of restrictive burn scars and vocal cord scars, and which naturally expire in 2030 and 2031. We also own pending applications in the U.S. and several foreign countries related to topical formulations of autologous dermal fibroblasts and uses thereof, which, if issued would naturally expire in 2031.

Competition

Our competitors in the autologous cell therapy and drug development space include, but are not limited to, bluebird bio, Inc. and Sangamo BioSciences, Inc. We are not aware of any competitors for our azficel-T drug development programs for the treatment of restrictive burn scarring or vocal cord scarring. There are many companies currently competing in drug development for rare diseases. These include, but are not limited to, Vertex Pharmaceuticals, Inc., Alexion Pharmaceuticals, Inc. and Genzyme Corporation.

Many of our competitors have substantially greater financial resources and larger research and development organizations. In addition, our experience in clinical trials, obtaining FDA and other regulatory approvals, manufacturing and commercialization of products may be more limited. We also compete in recruiting and retaining highly qualified scientific and regulatory personnel.

Recent Financing Activity

In October of 2013, we completed an underwritten public offering of 11,000,000 shares of common stock at a public offering price of $4.10 per share. The net proceeds to us, after underwriting discounts and commissions and estimated offering expenses, were approximately $42.1 million. The underwriters for the public offering of common stock partially exercised their over-allotment option to purchase an additional 1,311,698 shares of common stock at a public offering price of $4.10 per share. The partial exercise of the over-allotment option increased the aggregate net proceeds to us, after underwriting discounts and commissions and estimated offering expenses, from approximately $42.1 million to approximately $47.1 million.

Research and Development

We expense research and development costs as they are incurred. For the years ended December 31, 2013, 2012 and 2011, we incurred research and development expenses of $12.6 million, $9.0 million and $7.2 million, respectively.

Government Regulation

We are subject to extensive government regulation, principally by the FDA and state and local authorities in the United States and by comparable agencies in foreign countries. Governmental authorities in the United States extensively regulate the pre-clinical and clinical testing, safety, efficacy, research, development, manufacturing, labeling, storage, record-keeping, advertising, promotion, import, export, marketing and distribution, among other things, of pharmaceutical products under various federal laws including the Federal Food, Drug and Cosmetic Act, or FFDCA, the Public Health Service Act, or PHSA, and under comparable laws by the states and in most foreign countries.

Domestic Regulation

In the United States, the FDA, under the Federal Food, Drug, and Cosmetic Act (FFDCA), the Public Health Service Act (PHSA), and other federal statutes and regulations, subjects pharmaceutical and biologic products to rigorous review. If we do not comply with applicable requirements, we may be fined, the government may refuse to approve our marketing applications or allow us to manufacture or market our products or product candidates, and we

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may be criminally prosecuted. The FDA also has the authority to discontinue or suspend manufacture or distribution, require a product withdrawal or recall or revoke previously granted marketing authorizations if we fail to comply with regulatory standards or if we encounter problems during commercial operations.

FDA Approval Process

To obtain approval of a new product from the FDA, we must, among other requirements, submit data demonstrating the product s safety and efficacy as well as detailed information on the manufacture and composition of the product candidate. In most cases, this entails extensive laboratory tests and pre-clinical and clinical trials. This testing and the preparation of necessary applications and processing of those applications by the FDA are expensive and typically take many years to complete. The FDA may deny our applications or may not act quickly or favorably in reviewing these applications, and we may encounter significant difficulties or costs in our efforts to obtain FDA approvals that could delay or preclude us from marketing any products we may develop. The FDA also may require post-marketing testing and surveillance to monitor the effects of approved products or place conditions on any approvals that could restrict the commercial applications of these products. Regulatory authorities may withdraw product approvals if we fail to comply with regulatory standards or if we encounter problems following initial marketing. With respect to patented products or technologies, delays imposed by the governmental approval process may materially reduce the period during which we may have the exclusive right to exploit the products or technologies.

The FDA does not apply a single regulatory scheme to human tissues and the products derived from human tissue. On a product-by-product basis, the FDA may regulate such products as drugs, biologics, or medical devices, in addition to regulating them as human cells, tissues, or cellular or tissue-based products (HCT/P), depending on whether or not the particular product triggers any of an enumerated list of regulatory factors. A fundamental difference in the treatment of products under these classifications is that the FDA generally permits HCT/Ps that do not trigger any of those regulatory factors to be commercially distributed without marketing approval. In contrast, products that trigger those factors, such as if they are more than minimally manipulated when processed or manufactured, are regulated as drugs, biologics, or medical devices and require FDA approval. We have determined that our Fibrocell Therapy (TM) triggers regulatory factors that make it a biologic, in addition to an HCT/P, and consequently, we must obtain approval from FDA before marketing Fibrocell Therapy (TM) and must also satisfy all regulatory requirements for HCT/Ps.

The process required by the FDA before a new drug or biologic may be marketed in the United States generally involves the following:

- completion of pre-clinical laboratory tests or trials and formulation studies;

- submission to the FDA of an Investigational New Drug (IND) application for a new drug or biologic, which must become effective before human clinical trials may begin;

- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the proposed drug or biologic for its intended use;

- detailed information on product characterization and manufacturing process; and

- submission and approval of a New Drug Application (NDA) for a drug, or a Biologics License Application (BLA) for a biologic.

Pre-clinical tests include laboratory evaluation of product chemistry formulation and stability, as well as animal and other studies to evaluate toxicity. In view of the autologous nature of our product candidates and our prior clinical experience with our product candidates, we concluded that it was reasonably safe to initiate clinical trials without pre-clinical studies and that the clinical trials would be adequate to further assess both the safety and efficacy of our product candidates. Under FDA regulations, the results of any pre-clinical testing, together with manufacturing information and analytical data, are submitted to the FDA as part of an IND application. The FDA requires a 30-day waiting period after the filing of each IND application before clinical trials may begin, in order to ensure that human research subjects will not be exposed to unreasonable health risks. At any time during this 30-day period or at any time thereafter, the FDA may halt proposed or ongoing clinical trials, or may authorize trials only on specified terms. The

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IND application process may become extremely costly and substantially delay development of our products. Moreover, positive results of pre-clinical tests will not necessarily indicate positive results in clinical trials.

The sponsor typically conducts human clinical trials in three sequential phases, which may overlap. These phases generally include the following:

- Phase I: The product is usually first introduced into healthy humans or, on occasion, into patients, and is tested for safety, dosage tolerance, absorption, distribution, excretion and metabolism;

- Phase II: The product is introduced into a limited subject population to:

- assess its efficacy in specific, targeted indications;

- assess dosage tolerance and optimal dosage; and

- identify possible adverse effects and safety risks.

- Phase III: These are commonly referred to as pivotal studies. If a product is found to have an acceptable safety profile and to be potentially effective in Phase II clinical trials, new clinical trials will be initiated to further demonstrate clinical efficacy, optimal dosage and safety within an expanded and diverse subject population at geographically dispersed clinical study sites; and

- If the FDA does ultimately approve the product, it may require post-marketing testing, including potentially expensive Phase IV studies, to confirm or further evaluate its safety and effectiveness.

Before proceeding with a study, sponsors may seek a written agreement from the FDA regarding the design, size, and conduct of a clinical trial. This is known as a Special Protocol Assessment (SPA). Among other things, SPAs can cover clinical studies for pivotal trials whose data will form the primary basis to establish a product s efficacy. SPAs thus help establish up-front agreement with the FDA about the adequacy of a clinical trial design to support a regulatory approval, but the agreement is not binding if new circumstances arise. Even if the FDA agrees to an SPA, the agreement may be changed by the sponsor or the FDA on written agreement by either parties, or if a senior FDA official determines that a substantial scientific issue essential to determining the safety or effectiveness of the product was identified after the testing began. There is no guarantee that a study will ultimately be adequate to support an approval, even if the study is subject to an SPA. The FDA retains significant latitude and discretion in interpreting the terms of the SPA agreement and the data and results from any study that is the subject of the SPA agreement.

Clinical trials must meet requirements for Institutional Review Board (IRB) oversight, patient informed consent and the FDA s Good Clinical Practices. Prior to commencement of each clinical trial, the sponsor must submit to the FDA a clinical plan, or protocol, accompanied by the approval of the committee responsible for overseeing clinical trials at the clinical trial sites. The FDA or the IRB at each institution at which a clinical trial is being performed may order the temporary or permanent discontinuation of a clinical trial at any time if it believes that the clinical trial is not being conducted in accordance with FDA requirements or presents an unacceptable risk to the clinical trial subjects. Data safety monitoring committees, who monitor certain studies to protect the welfare of study subjects, may also require that a clinical study be discontinued or modified.

The sponsor must submit to the FDA the results of the pre-clinical and clinical trials, together with, among other things, detailed information on the manufacturing and composition of the product, and proposed labeling, in the form of an NDA, or, in the case of a biologic, a BLA. The applicant must also submit with the NDA or BLA a substantial user fee payment, unless a waiver or reduction applies. The FDA has advised us that it would regulate our Fibrocell Therapy as a biologic. Therefore, we expect to submit BLAs to seek approval of our product candidates. In some cases, we may be able to expand the indications in an approved BLA through a Prior Approval Supplement. Each NDA or BLA submitted for FDA approval is usually reviewed for administrative completeness and reviewability within 60 days following submission of the application. If deemed complete, the FDA will file the NDA or BLA, thereby triggering substantive review of the application. The FDA can refuse to file any NDA or

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BLA that it deems incomplete or not properly reviewable. Once the submission has been accepted for filing, the FDA will review the application and will usually respond to the applicant in accordance with performance goals the FDA has established for the review of NDAs and BLAs - six months from the receipt of the application for priority applications and ten to twelve months for regular applications. The review process is often significantly extended by FDA requests for additional information, preclinical or clinical studies, clarification, or a risk evaluation and mitigation strategy (REMS) or by changes to the application submitted by the applicant in the form of amendments. The FDA may refer applications for novel product candidates which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation, and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

It is possible that our product candidates will not successfully proceed through this approval process or that the FDA will not approve them in any specific period of time, or at all. The FDA may deny or delay approval of applications that do not meet applicable regulatory criteria, or if the FDA determines that the clinical data does not adequately establish the safety and efficacy of the product. Satisfaction of FDA pre-market approval requirements for a new biologic is a process that may take a number of years and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease. The FDA reviews these applications and, when and if it decides that adequate data is available to show that the product is both safe and effective and that other applicable requirements have been met, approves the drug or biologic for marketing. Government regulation may delay or prevent marketing of potential products for a considerable period of time and imposes costly procedures upon our activities. Success in early stage clinical trials does not assure success in later stage clinical trials. Data obtained from clinical activities is not always conclusive and may be susceptible to varying interpretations that could delay, limit or prevent regulatory approval. Upon approval, a product candidate may be marketed only for those indications approved in the BLA or NDA and may be subject to labeling and promotional requirements or limitations, including warnings, precautions, contraindications and use limitations, which could materially impact profitability. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-market regulatory standards and requirements are not maintained or if safety, efficacy or other problems occur after the product reaches the marketplace.

The FDA may, during its review of an NDA or BLA, ask for additional study data. If the FDA does ultimately approve the product, it may require post-marketing testing, including potentially expensive Phase IV studies, to confirm or otherwise further evaluate the safety and effectiveness of the product. The FDA also may require, as a condition to approval or continued marketing of a drug, a REMS to ensure that the benefits of a drug or biologic product outweigh its risks. REMS can include additional educational materials for healthcare professionals and patients such as Medication Guides and Patient Package Inserts, a plan for communicating information to healthcare professionals, and restricted distribution of the product. In addition, the FDA may, in some circumstances, impose restrictions on the use of the product, which may be difficult and expensive to administer and may require prior approval of promotional materials. Following approval, FDA may require labeling changes or impose new post-approval study, risk management, or distribution restriction requirements.

Ongoing FDA Requirements

Before approving an NDA or BLA, the FDA usually will inspect the facilities at which the product is manufactured and will not approve the product unless the manufacturing facilities are in compliance with the FDA s current Good Manufacturing Practices (cGMP) requirements which govern the manufacture, holding and distribution of a product. Manufacturers of human cellular or tissue-based biologics also must comply with the FDA s Good Tissue Practices, as applicable, and the general biological product standards. Following approval, the FDA periodically inspects drug and biologic manufacturing facilities to ensure continued compliance with the cGMP requirements. Manufacturers must continue to expend time, money and effort in the areas of production, quality control, record keeping and reporting to ensure compliance with those requirements. Failure to comply with these requirements subjects the manufacturer to possible legal or regulatory action, such as suspension of manufacturing, seizure of product, voluntary recall of product, withdrawal of marketing approval or civil or criminal penalties. Adverse experiences with the product must be reported to the FDA and could result in the imposition of marketing restrictions through labeling changes or market removal. Product approvals may be withdrawn if compliance with regulatory requirements is not maintained or if problems concerning safety or efficacy of the product occur following approval.

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The labeling, advertising, promotion, marketing and distribution of a drug or biologic product also must be in compliance with FDA and Federal Trade Commission (FTC) requirements which include, among others, promotional activities, standards and regulations for direct-to-consumer advertising, promotional activities involving the internet, and industry sponsored scientific and educational activities. In general, all product promotion must be consistent with the labeling approved by the FDA for such product, contain a balanced presentation of information on the product s uses, benefits, risks, and important safety information and limitations on use, and otherwise not be false or misleading. The FDA, as well as the FTC, have very broad enforcement authority, and failure to abide by these regulations can result in penalties, including the issuance of a warning letter directing a company to correct deviations from regulatory standards and enforcement actions that can include seizures, injunctions and criminal prosecution. Failure to comply with applicable FDA requirements and restrictions also may subject a company to adverse publicity and enforcement action by the FDA, the DOJ, or the Office of the Inspector General of HHS, as well as state authorities. This could subject the company to a range of penalties that could have a significant commercial impact, including civil and criminal fines and agreements that materially restrict the manner in which a company promotes or distributes its products.

Manufacturers are also subject to various laws and regulations governing laboratory practices, the experimental use of animals and the use and disposal of hazardous or potentially hazardous substances in connection with their research. In each of the above areas, the FDA has broad regulatory and enforcement powers, including the ability to levy fines and civil penalties, suspend or delay issuance of approvals, seize or recall products and deny or withdraw approvals.

Post-Marketing Obligations

The Food and Drug Administration Amendments Act of 2007 expanded FDA authority over drug products after approval. All approved drug products are subject to continuing regulation by the FDA, including record-keeping requirements, reporting of adverse experiences with the product, sampling and distribution requirements, notifying the FDA and gaining its approval of certain manufacturing or labeling changes, complying with certain electronic records and signature requirements, submitting periodic reports to the FDA, maintaining and providing updated safety and efficacy information to the FDA, and complying with FDA promotion and advertising requirements. Failure to comply with the statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory action, such as warning letters, suspension of manufacturing, seizure of product, injunctive action, criminal prosecution, or civil penalties.

The FDA may require post-marketing studies or clinical trials to develop additional information regarding the safety of a product. These studies or trials may involve continued testing of a product and development of data, including clinical data, about the product s effects in various populations and any side effects associated with long-term use. The FDA may require post-marketing studies or trials to investigate possible or known serious risks or signals of serious risks, or to identify unexpected serious risks, and may require periodic status reports if new safety information develops. Failure to conduct these studies in a timely manner may result in substantial civil fines, or withdrawal of product approval.

Drug and biologics manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and to list their products with the FDA. The FDA periodically inspects manufacturing facilities in the United States and abroad in order to assure compliance with the applicable cGMP regulations and other requirements. Facilities also are subject to inspections by other federal, foreign, state or local agencies. In complying with the cGMP regulations, manufacturers must continue to assure that the product meets applicable specifications, regulations and other post-marketing requirements. We must ensure that any third-party manufacturers continue to ensure full compliance with all applicable regulations and requirements. Failure to comply with these requirements subjects the manufacturer to possible legal or regulatory action, such as suspension of manufacturing or recall or seizure of product.

Also, newly discovered or developed safety or efficacy data may require changes to a product s approved labeling, including the addition of new warnings and contraindications, additional pre-clinical or clinical studies, or even in some instances, withdrawal of the approval. Violations of regulatory requirements at any stage, including after approval, may result in various adverse consequences, including the FDA s withdrawal of an approved product from the market, other voluntary or FDA-initiated action that could delay or restrict further marketing, and the imposition of civil fines and criminal penalties against the manufacturer and BLA holder. In addition, later

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discovery of previously unknown problems may result in restrictions on the product, manufacturer or BLA holder, including withdrawal of the product from the market. Furthermore, new government requirements may be established that could delay or prevent regulatory approval of our products under development, or affect the conditions under which approved products are marketed.

With respect to our LAVIV® product, which was approved in June 2011, as part of our label the FDA required us, based on clinical study data, to conduct a post-marketing study of approximately 2,700 patients (to assess the risk of skin cancer such as basal cell cancer in the area of LAVIV® injections and the risk of immune-mediated hypersensitivity reactions such as leukocytoclasticvasculitis), which has not yet commenced and must be completed by 2016. The FDA concluded that analysis of spontaneous post-marketing adverse events would not be sufficient to evaluate potential risk of such events with use of LAVIV® and they required performance of a formal post-marketing study involving 2,700 patients.

We have been engaged in discussions with the FDA on the design of the post-marketing study, as we believe the original study design, especially the sample size, is no longer consistent with our current emphasis on development of LAVIV® for critical medical applications and our decreased involvement with cosmetic applications. We are about to begin enrolling patients into a post-market study and, once the study begins, we will be in a better position to continue negotiating with the FDA on a revised study design.

HIPAA Requirements

Other federal legislation may affect our ability to obtain certain health information in conjunction with our research activities. We may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. The Health Insurance Portability and Accountability Act of 1996 (HIPAA), as amended by HITECH, and its implementing regulations, imposes requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA s privacy and security standards directly applicable to business associates independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney s fees and costs associated with pursuing federal civil actions. In addition, state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Other U.S. Regulatory Requirements

In the United States, the research, manufacturing, distribution, sale, and promotion of drug and biological products are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare and Medicaid Services (formerly the Health Care Financing Administration), other divisions of the U.S. Department of Health and Human Services (e.g., the Office of Inspector General), the U.S. Department of Justice and individual U.S. Attorney offices within the Department of Justice, and state and local governments. For example, sales, marketing and scientific/educational grant programs must comply with the anti-fraud and abuse provisions of the Social Security Act, the False Claims Act, and similar state laws, each as amended.

If a drug product is reimbursed by Medicare or Medicaid, pricing and rebate programs must comply with, as applicable, the Medicare Modernization Act as well as the Medicaid rebate requirements of the Omnibus Budget Reconciliation Act of 1990, or the OBRA, and the Veterans Health Care Act of 1992, or the VHCA, each as amended. Among other things, the OBRA requires drug manufacturers to pay rebates on prescription drugs to state Medicaid programs and empowers states to negotiate rebates on pharmaceutical prices, which may result in prices for our future products that will likely be lower than the prices we might otherwise obtain. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. Under the VHCA, drug companies are required to offer some drugs at a reduced price to a number of federal agencies including the U.S. Department of Veterans Affairs and the U.S. Department of Defense, or DoD, the Public Health Service and some private Public Health Service designated entities in order to participate

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in other federal funding programs including Medicaid. Participation under the VHCA requires submission of pricing data and calculation of discounts and rebates pursuant to complex statutory formulas, as well as the entry into government procurement contracts governed by the Federal Acquisition Regulation. All of these activities are also potentially subject to federal and state consumer protection, unfair competition, and other laws.

In March 2010, President Obama signed one of the most significant healthcare reform measures in decades. The Affordable Care Act, substantially changes the way healthcare will be financed by both governmental and private insurers, and significantly impacts the pharmaceutical industry. The Affordable Care Act was a sweeping law intended to broaden access to health insurance, reduce or constrain the growth of healthcare spending, enhance remedies against fraud and abuse, add new transparency requirements for health care and health insurance industries, impose new taxes and fees on the health industry and impose additional health policy reforms. The Affordable Care Act will impact existing government healthcare programs and will result in the development of new programs. While the Affordable Care Act could result in additional downward pressure on coverage and the price that we could receive for any approved product, we do not believe it to be applicable to our business at this time. Any reduction in reimbursement from Medicare and other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products. In addition, it is possible that there will be further legislation or regulation that could harm our business, financial condition and results of operations.

The federal Anti-Kickback Statute prohibits, among other things, knowingly and willfully offering, paying, soliciting or receiving remuneration to induce or in return for purchasing, leasing, ordering or arranging for the purchase, lease or order of any healthcare item or service reimbursable under Medicare, Medicaid or other federally financed healthcare programs. This statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. Although there are a number of statutory exemptions and regulatory safe harbors protecting some business arrangements from prosecution, the exemptions and safe harbors are drawn narrowly and practices that involve remuneration intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exemption or safe harbor. Our practices may not in all cases meet all of the criteria for safe harbor protection from federal Anti-Kickback Statute liability. The reach of the Anti-Kickback Statute was broadened by the Affordable Care Act, which, among other things, amends the intent requirement of the federal Anti-Kickback Statute. Pursuant to the statutory amendment, a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, the Affordable Care Act provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act (discussed below) or the civil monetary penalties statute, which imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

The federal False Claims Act prohibits any person from knowingly presenting, or causing to be presented, a false claim for payment to the federal government or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes any request or demand for money or property presented to the U.S. government. Recently, several pharmaceutical and other healthcare companies have been prosecuted under these laws for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. Other companies have been prosecuted for causing false claims to be submitted because of the companies marketing of the product for unapproved, and thus non-reimbursable, uses. HIPAA created new federal criminal statutes that prohibit knowingly and willfully executing a scheme to defraud any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Also, many states have similar fraud and abuse statutes or regulations that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor.

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International Regulation

The regulation of our product candidates outside of the United States varies by country. Certain countries regulate human tissue products as a pharmaceutical product, which would require us to make extensive filings and obtain regulatory approvals before selling our product candidates. Certain other countries classify our product candidates as human tissue for transplantation but may restrict its import or sale. Other countries may have no application regulations regarding the import or sale of products similar to our product candidates, creating uncertainty as to what standards we may be required to meet.

Employees

As of May 23, 2014, we employed 52 people on a full-time basis all located in the United States. We also have 5 people working on a contract basis or part-time basis. None of our employees are covered by a collective bargaining agreement, and we consider our relationship with our employees to be good. We also employ consultants and temporary labor on an as needed basis to supplement existing staff.

Available Information

We file reports with the Securities and Exchange Commission (SEC or Commission). We make available on our website (www.Fibrocellscience.com) free of charge our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports as soon as reasonably practicable after we electronically file such materials with or furnish them to the SEC. Information appearing at our website is not a part of this Annual Report on Form 10-K/A. You can also read and copy any materials we file with the Commission at its Public Reference Room at 100 F Street, NE, Washington, DC 20549. You can obtain additional information about the operation of the Public Reference Room by calling the Commission at 1-800-SEC-0330. In addition, the Commission maintains an Internet site (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the Commission, including Fibrocell Science.

Corporate History

On August 10, 2001, the company then known as American Financial Holding, Inc., acquired Isolagen Technologies through the merger of a wholly owned subsidiary, Isolagen Acquisition Corp., and an affiliated entity, Gemini IX, Inc., with and into Isolagen Technologies. As a result of the merger, Isolagen Technologies became a wholly owned subsidiary. On November 13, 2001, the name was changed to Isolagen, Inc. On August 27, 2009, the United States Bankruptcy Court for the District of Delaware in Wilmington entered an order, or Confirmation Order, confirming the Joint First Amended Plan of Reorganization dated July 30, 2009, as supplemented by the Plan Supplement dated August 21, 2009, or the Plan, of Isolagen, Inc. and Isolagen s wholly owned subsidiary, Isolagen Technologies, Inc. The effective date of the Plan was September 3, 2009. Isolagen, Inc. and Isolagen Technologies, Inc. were subsequently renamed Fibrocell Science, Inc. and Fibrocell Technologies, Inc., respectively.

Item 1A. Risk Factors

Investing in our company involves a high degree of risk. Before investing in our company you should carefully consider the following risks, together with the financial and other information contained in this amended Form 10-K/A. If any of the following risks actually occurs, our business, prospects, financial condition and results of operations could be adversely affected. In that case, the trading price of our common stock would likely decline and you may lose all or a part of your investment.

We have identified a material weakness in our internal control over financial reporting. This material weakness could continue to adversely affect our ability to report our results of operations and financial condition accurately and in a timely manner.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with U.S. generally accepted

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accounting principles (GAAP). Our management is likewise required, on a quarterly basis, to evaluate the effectiveness of our internal controls and to disclose any changes and material weaknesses in those internal controls. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the Company s annual or interim financial statements will not be prevented or detected on a timely basis.

As described elsewhere in this Annual Report on Form 10-K/A, we identified a material weakness in our internal control over financial reporting related to our prior interpretation of ASC 815 and our initial classification and subsequent accounting of warrants as either liabilities or equity instruments. As a result of this material weakness, our management concluded that our internal control over financial reporting was not effective as of December 31, 2013. This material weakness resulted in a misstatement of our liabilities, non-cash expense relating to the changes in fair value of common stock warrants, additional paid-in capital, accumulated deficit accounts and related financial disclosures.

To respond to this material weakness, we have devoted, and plan to continue to devote, significant effort and resources to the remediation and improvement of our internal control over financial reporting. While we have processes to identify and intelligently apply developments in accounting, we plan to enhance these processes to better evaluate our research and understanding of the nuances of increasingly complex accounting standards. Our plans at this time include providing enhanced access to accounting literature, research materials and documents and increased communication among our personnel and third party professionals with whom we consult regarding complex accounting applications. The elements of our remediation plan can only be accomplished over time and we can offer no assurance that these initiatives will ultimately have the intended effects. For a discussion of management s consideration of the material weakness identified, related to our warrant accounting, see Note 3, Restatement of Consolidated Financial Statements to the consolidated financial statements, as well as Part II, Item 9A, Controls and Procedures included in this amended Annual Report on Form 10-K/A.

Any failure to maintain such internal controls could adversely impact our ability to report our financial results on a timely and accurate basis. If our financial statements are not accurate, investors may not have a complete understanding of our operations. Likewise, if our financial statements are not filed on a timely basis as required by the SEC and NYSE, we could face severe consequences from those authorities. In either case, there could result a material adverse effect on our business. Inferior internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our stock. We can give no assurance that the measures we have taken and plan to take in the future will remediate the material weaknesses identified or that any additional material weaknesses or restatements of financial results will not arise in the future due to a failure to implement and maintain adequate internal control over financial reporting or circumvention of these controls. In addition, even if we are successful in strengthening our controls and procedures, in the future those controls and procedures may not be adequate to prevent or identify irregularities or errors or to facilitate the fair presentation of our consolidated financial statements.

The Company faces risks in connection with the expansion of its business in China.

In April 2010, we entered into a letter of intent with Chinese company Heifei Meifu Bio-Tech Limited Co. to form a joint venture to commercialize autologous fibroblast therapies in Asia (excluding Japan) and to produce and develop such therapies in China. This letter of intent was intended to serve as the template for a joint venture agreement between the Company and Heifei Meifu, which would expand the scope of the Company s operations to China and Asia more broadly. However, to date we and Heifei Meifu have not received Chinese governmental approval to form the proposed joint venture and we are considering alternative business structures to develop our business in Asia (excluding Japan). As the Company furthers its commitment to China, it is increasingly exposed to risks in that region. These risks include changes in laws and regulations, currency fluctuations, increased competition and changes in economic conditions, including those related to consumer spending. Adverse developments in these areas could cause the Company to lose some or all of its future investment in China and could cause the Company to fail to achieve anticipated growth.

Moreover, certain risks and uncertainties of doing business in China are solely within the control of the Chinese government, and Chinese law regulates both the scope of the Company s investment in China and the

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business conducted by it within China. The Company cannot provide assurance that the Chinese government will permit the distribution of the Company s products in China or that the timing of such distribution will be favorable to the Company. There are also uncertainties regarding the interpretation and application of laws and regulations and the enforceability of intellectual property and contract rights in China. If the Company were unable to navigate China s regulatory environment, including with respect to the joint venture, or if the Company were unable to enforce its intellectual property or contract rights in China, the Company s business could be adversely impacted.

Our proposed joint venture with Heifei Meifu Bio-Tech Limited Co., if consummated, may limit our ability to independently develop and commercialize our products in China.

In April 2010, we entered into a letter of intent with Chinese company Heifei Meifu Bio-Tech Limited Co. to form a joint venture to commercialize autologous fibroblast therapies in Asia (excluding Japan) and to produce and develop such therapies in China. This letter of intent was intended to serve as the template for a joint venture agreement between the Company and Heifei Meifu. To date, we and Heifei Meifu have not received Chinese governmental approval to form the proposed joint venture and we are considering alternative business structures to develop our business in Asia (excluding Japan). Assuming we receive the necessary approvals and the joint venture is formed or if we enter into an alternative business structure, the joint venture or alternative business structure would establish the exclusive means for us to develop, produce and commercialize autologous fibroblast therapies in Asia (excluding Japan). Assuming we receive the necessary approvals and the joint venture is formed or we enter into an alternative business structure, we expect to grant the joint venture or alternative business structure exclusive licenses under certain of our intellectual property to make and sell joint venture products. As a result of these licenses, we expect to generally no longer have an independent right to make or sell autologous fibroblast therapies in Asia (excluding Japan).

If, for any reason, the joint venture or alternative business structure is not fully supported or is not successful and the joint venture or alternative business structure does not allow us to pursue autologous fibroblast therapies independently, this arrangement could impair our ability to develop and commercialize such products, which could have a material adverse effect on our business and long term prospects. In addition, Heifei Meifu Bio-Tech Limited Co. could take steps that could weaken our intellectual property rights with respect to our autologous fibroblast therapies in China.

Clinical trials may fail to demonstrate the safety or efficacy of our product candidates, which could prevent or significantly delay regulatory approval and prevent us from raising additional financing.

Prior to receiving approval to commercialize any of our product candidates, we must demonstrate with substantial evidence from well-controlled clinical trials, and to the satisfaction of the FDA and other regulatory authorities in the United States and abroad, that our product candidates are both safe and effective. We will need to demonstrate our product candidates efficacy and monitor their safety throughout the process. We previously completed a pivotal Phase III clinical trial related to LAVIV®. However, the success of prior pre-clinical or clinical trials does not ensure the success of these trials, which are being conducted in populations with different racial and ethnic demographics than our previous trials. If our current trials or any future clinical trials are unsuccessful, our business and reputation would be harmed and the price at which our stock trades could be adversely affected.

All of our product candidates are subject to the risks of failure inherent in the development of biotherapeutic products. The results of early-stage clinical trials of our product candidates do not necessarily predict the results of later-stage clinical trials. Product candidates in later-stage clinical trials may fail to demonstrate desired safety and efficacy traits despite having successfully progressed through initial clinical testing. Even if we believe the data collected from clinical trials of our product candidates is promising, this data may not be sufficient to support approval by the FDA or any other U.S. or foreign regulatory approval. Pre-clinical and clinical data can be interpreted in different ways.

Accordingly, FDA officials could reach different conclusions in assessing such data than we do which could delay, limit or prevent regulatory approval. In addition, the FDA, other regulatory authorities, our Institutional Review Boards or we may suspend or terminate clinical trials at any time.

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Obtaining FDA and other regulatory approvals is complex, time consuming and expensive, and the outcomes are uncertain.

The process of obtaining FDA and other regulatory approvals is time consuming, expensive and difficult. Clinical trials are required to establish the safety and efficacy of product candidates. Applications to market product candidates must be submitted to the FDA which must be reviewed for approval and approved by the FDA before product candidates may be marketed and clinical trials, manufacturing, and the marketing of products, if approved, are subject to strict regulatory compliance.

The commencement and completion of clinical trials for any of our product candidates could be delayed or prevented by a variety of factors, including:

- delays in obtaining regulatory approvals to commence a study;
- delays in identifying and reaching agreement on acceptable terms with prospective clinical trial sites;
- delays or failures in obtaining approval of our clinical trial protocol from an institutional review board, or IRB, to conduct a clinical trial at a prospective study site;
- delays in the enrollment of subjects;
- manufacturing difficulties;
- failure of our clinical trials and clinical investigators to be in compliance with the FDA s Good Clinical Practices, or GCP;
- failure of our third-party contract research organizations, clinical site organizations or other clinical trial managers, to satisfy their contractual duties, comply with regulations or meet expected deadlines;
- lack of efficacy during clinical trials; or

- unforeseen safety issues.

We do not know whether our clinical trials will need to be restructured or will be completed on schedule, if at all, or whether they will provide data necessary to support necessary regulatory approval. Significant delays in clinical trials will impede our ability to commercialize our product candidates and generate revenue, and could significantly increase our development costs.

We utilize bovine-sourced materials to manufacture LAVIV®, our Autologous Crème product and our product candidates. It is possible that future FDA regulations may require us to change the source of the bovine-sourced materials we use in our products or to cease using bovine-sourced materials. If we are required to use alternative materials in our products, and in the event that such alternative materials are available to us, or if we choose to change the materials used in our products in the future, we would need to validate the new manufacturing process and run comparability trials with the reformulated product, which could delay our submission for regulatory approval of our product candidates and negatively impact the commercialization of LAVIV®, our Autologous Crème product and any of our product candidates, if approved.

With respect to LAVIV® and any of our product candidates, if marketing approval is received from the FDA, the FDA may impose post-marketing requirements, such as:

- labeling and advertising requirements, restrictions or limitations, including the inclusion of warnings, precautions, contraindications or use limitations that could have a material impact on the future profitability of our product candidates;

- testing and surveillance to further evaluate or monitor our future products and their continued compliance with regulatory standards and requirements;

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- submitting products for inspection; or

- imposing a risk evaluation and mitigation strategy, or REMS, to ensure that the benefits of the drug outweigh the risks.

With respect to our LAVIV® product, which was approved in June 2011, as part of our label the FDA required us, based on clinical study data, to conduct a post-marketing study of approximately 2,700 patients (to assess the risk of skin cancer such as basal cell cancer in the area of LAVIV® injections and the risk of immune-mediated hypersensitivity reactions such as leukocytoclasticvasculitis), which has not yet commenced and must be completed by 2016. The FDA concluded that analysis of spontaneous post-marketing adverse events would not be sufficient to evaluate potential risk of such events with use of LAVIV® and they required performance of a formal post-marketing study involving 2,700 patients.

We have been engaged in discussions with the FDA on the design of the post-marketing study, as we believe the original study design, especially the sample size, is no longer consistent with our current emphasis on development of LAVIV® for critical medical applications and our decreased involvement with cosmetic applications. We are about to begin enrolling patients into a post-market study and, once the study begins, we will be in better position to continue negotiating with the FDA on a revised study design. Although we believe we will be able to reach an agreement with the FDA on this post-marketing study, to the extent we are unable to complete an acceptable post-marketing study the FDA may determine to take action against us, including the withdrawal of its approval of LAVIV®

Ethical, legal and social concerns about synthetic biologically engineered products could limit or prevent the use of the product candidates we may develop in the future with Intrexon.

The products candidates we are developing with Intrexon use a synthetic biology platform. Public perception about the safety of genetically engineered products, as well as ethical concerns over these products, could influence public acceptance of these product candidates. If we are not able to overcome the ethical, legal and social concerns relating to synthetic biological engineering, these product candidates may not be accepted. These concerns could result in increased expenses, regulatory scrutiny, delays or other impediments to the public acceptance and commercialization of these product candidates. Our ability to develop and commercialize these product candidates could be limited by public attitudes and governmental regulation.

The subject of genetically-modified organisms has received negative publicity. This adverse publicity could lead to greater regulation of genetically altered products. Further, there is a risk that our product candidates could cause adverse health effects or other adverse events, which could also lead to negative publicity.

The synthetic biological technologies that are being utilizing for the product candidates we are developing with Intrexon may have significantly enhanced characteristics compared to those found in naturally occurring organisms, enzymes or microbes. While these synthetic biological technologies are being produced only for use in a controlled laboratory and industrial environment, the release of such synthetic biological technologies into uncontrolled environments could have unintended consequences. Any adverse effect resulting from such a release could have a material adverse effect on our business and financial condition, and we may have exposure to liability for any resulting harm.

We will incur additional expenses in connection with our exclusive channel collaboration arrangement with Intrexon.

Pursuant to our exclusive channel collaboration with Intrexon, we are responsible for future research and development expenses of product candidates developed under such collaboration, the effect of which we expect will increase the level of our overall research and development expenses going forward. Although all manufacturing, preclinical studies and human clinical trials are expensive and difficult to design and implement, costs associated with the manufacturing, research and development of biologic product candidates are generally greater in comparison to small molecule product candidates. We have added personnel and expect to add additional personnel, either directly or through consulting arrangements, to support our exclusive channel collaboration with Intrexon.

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Because our collaboration with Intrexon is relatively new, we have only recently assumed development responsibility and costs associated with such program. In addition, because development activities are determined pursuant to a joint steering committee comprised of Intrexon and ourselves and we have limited experience, future development costs associated with this program may be difficult to anticipate and exceed our expectations. Our actual cash requirements may vary materially from our current expectations for a number of other factors that may include, but are not limited to, unanticipated technical challenges, changes in the focus and direction of our development activities or adjustments necessitated by changes in the competitive landscape in which we operate. If we are unable to continue to financially support such collaboration due to our own working capital constraints, we may be forced to discontinue the collaboration or delay our activities.

We may not be able to retain the exclusive rights licensed to us by Intrexon.

Under the Channel Agreement, we are using Intrexon s technology in connection with various of our product candidates. The Channel Agreement grants us a worldwide license to use patents and other intellectual property of Intrexon in connection with the research, development, use, importing, manufacture, sale, and offer for sale of products within a pre-defined field that we set forth above in the Item 1. Business Intrexon Collaboration .

The Channel Agreement may be terminated by Intrexon if we fail to exercise diligent efforts in developing products through the collaboration or if we elect not to pursue the development of a therapy in the field identified by Intrexon that is a Superior Therapy as defined in the Channel Agreement. Upon such termination, the products covered by the Channel Agreement in active and ongoing Phase II or III clinical trials or later stage development through the Channel Agreement shall be entitled to be continued by us with a continuation of the related royalties for such products, and all rights to products covered by the Channel Agreement still in an earlier stage of development shall revert to Intrexon.

There can be no assurance that we will be able to successfully perform under the Channel Agreement and if the Channel Agreement is terminated it may prevent us from achieving our business objectives.

We are subject to significant regulation with respect to the manufacturing of our products.

All of those involved in the preparation of a cellular therapy for clinical trials or commercial sale, including our existing supply contract manufacturers and clinical trial investigators, are subject to extensive regulation by the FDA. Components of a finished therapeutic product approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with current Good Manufacturing Practices. These regulations govern manufacturing processes and procedures and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Our facilities and quality systems and the facilities and quality systems of some or all of our third party contractors and suppliers must pass inspection for compliance with the applicable regulations as a condition of FDA approval of our products. In addition, the FDA may, at any time, audit or inspect a manufacturing facility involved with the preparation of LAVIV® or our other potential products or the associated quality systems for compliance with the regulations applicable to the activities being conducted. The FDA also may, at any time following approval of a product for sale, audit our manufacturing facilities or those of our third party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulation occurs independent of such an inspection or audit, we or the FDA may require remedial measures that may be costly and/or time consuming for us or a third party to implement and that may include the temporary or permanent suspension of a clinical trial or commercial sales, recalls, market withdrawals, seizures or the temporary or permanent closure of a facility. Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business.

We have limited manufacturing capacity and any manufacturing difficulties, disruptions or delays could limit supply of our products and or adversely affect our ability to conduct our clinical trials.

Manufacturing biologic human therapeutic products is difficult, complex and highly regulated. We currently manufacture LAVIV® at one facility in the U.S. and we also plan to manufacture our product candidates in the same facility. Our ability to adequately and timely manufacture and supply our products is dependent on the

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uninterrupted and efficient operation of our sole facility and those of our third-party suppliers, which may be impacted by:

- availability or contamination of raw materials and components used in the manufacturing process, particularly those for which we have no other source or supplier;
- capacity of our facility and those of our suppliers;
- the performance of our information technology systems;
- compliance with regulatory requirements;
- inclement weather and natural disasters;
- changes in forecasts of future demand for product components;
- timing and actual number of production runs for product components;
- potential facility contamination by microorganisms or viruses;
- updating of manufacturing specifications; and
- product quality success rates and yields.

If the efficient manufacture and supply of our products is interrupted, we may experience delayed shipments or supply constraints. If we are at any time unable to provide an uninterrupted supply of our products to patients, we may lose patients and physicians may elect to prescribe competing therapeutics instead of our products, which could materially and adversely affect our product sales and results of operations. In addition, if we are unable to supply our clinical trials due to manufacturing limitations, our trials may be delayed or compromised.

Our manufacturing processes and those of our suppliers must undergo a potentially lengthy FDA approval process, as well as other regulatory approval processes, and are subject to continued review by the FDA and other regulatory authorities. It is a multi-year process to build and license a new manufacturing facility and it can take significant time to qualify and license a new supplier.

If regulatory authorities determine that we or our suppliers or certain of our third-party service providers have violated regulations or if they restrict, suspend or revoke our prior approvals, they could prohibit us from manufacturing our products or conducting clinical trials or selling our marketed products until we or the affected third-party service providers comply, or indefinitely. Because our third-party service providers are subject to FDA and, potentially, in the future, foreign regulatory authorities, alternative qualified third-party service providers may not be available on a timely basis or at all. If we or our third-party service providers cease or interrupt production or if our third-party service providers fail to supply materials, products or services to us, we may experience delayed shipments, and supply constraints for our products.

Our research, development and manufacturing operations depend on one facility. If such facility is destroyed or is out of operation for a substantial period of time, our business will be adversely impacted.

We currently conduct all our research, development and manufacturing operations in one facility located in Exton, Pennsylvania. As a result, all of the commercial manufacturing of LAVIV® and our Autologous Crème product for the U.S. market takes place at a single U.S. facility. In addition, most of our clinical trials for our product candidates primarily depend upon the manufacturing of such product candidates in the same facility. If regulatory, manufacturing or other problems require us to discontinue production at that facility, we will not be able to supply our product to our customers or have supplies for our clinical trials, which would adversely impact our business. If this facility or the equipment in it is significantly damaged or destroyed by fire, flood, power loss or similar events, we may not be able to quickly or inexpensively replace our manufacturing capacity or replace our facility at all. In

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the event of a temporary or protracted loss of this facility or equipment, we might not be able to transfer manufacturing to a third party. Even if we could transfer manufacturing to a third party, the shift would likely be expensive and time-consuming, particularly since the new facility would need to comply with the necessary regulatory requirements and we would need FDA approval before any products manufactured at that facility could be sold or used.

We have yet to be profitable, we expect losses to increase from current levels and we will continue to experience significant negative cash flow as we expand our operations and undertake additional clinical trials, which may limit or delay our ability to become profitable.

We have incurred losses since our inception, have not generated significant revenue from commercial sales of our products since emerging from bankruptcy, and have never been profitable. We are focused on product development and the commercialization of LAVIV® but we have limited manufacturing capacity. We expect to continue to experience increasing operating losses and negative cash flow as we continue our clinical trials for medical applications and as we continue our collaboration efforts with Intrexon.

We expect to continue to incur significant additional costs and expenses related to:

- FDA clinical trials and regulatory approvals;
- our collaborations with Intrexon;
- our investigation of the automation of manufacturing and our future expansion of manufacturing capabilities;
- the commercialization of LAVIV®;
- research and development;
- personnel costs; and
- development of relationships with strategic business partners, including physicians who might use our future products.

If our product candidates fail in clinical trials or do not gain regulatory approval, if our product candidates do not achieve market acceptance, or if we do not succeed in effectively and efficiently implementing manufacturing process and technology improvements to make our product commercially viable, we will not be profitable. If we fail to become and remain profitable, or if we are unable to fund our continuing losses, our business may fail.

We will continue to experience operating losses and significant negative cash flow from operations until we begin to generate significant revenue from LAVIV® or our new product candidates, which will require a significant increase in our manufacturing capacity, as well as FDA s approval for this increased capacity and significant capital expenditures. As a result of our limited operating history, we may not be able to correctly estimate our future operating expenses, which could lead to cash shortfalls.

We have a limited operating history and our primary business activities consist of conducting clinical trials, pursuing our collaboration with Intrexon and commercializing our LAVIV® product. As such, our historical financial data is of limited value in estimating future operating expenses. Our budgeted expense levels are based in part on our expectations concerning the costs of our clinical trials and our collaboration with Intrexon, which depend on the success of such trials and our ability to effectively and efficiently conduct such trials, and expectations related to our efforts to achieve FDA approval with respect to our product candidates. Our limited operating history and clinical trial experience make these costs difficult to forecast accurately. We may be unable to adjust our operations in a timely manner to compensate for any unexpected increase in costs. Further, our fixed manufacturing costs and business development and marketing expenses will increase significantly as we expand our operations. Accordingly, a significant increase in costs could have an immediate and material adverse effect on our business, results of

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operations and financial condition.

Our operating results may fluctuate significantly in the future, which may cause our results to fall below the expectations of securities analysts, stockholders and investors.

Our operating results may fluctuate significantly in the future as a result of a variety of factors, many of which are outside of our control. These factors include, but are not limited to:

- the timing, implementation and cost of our clinical studies;
- expenses in connection with our exclusive channel collaboration arrangement with Intrexon;
- the level of demand and profitability of LAVIV®;
- the timely and successful implementation of improved manufacturing processes;
- our ability to attract and retain personnel with the necessary strategic, technical and creative skills required for effective operations;
- the amount and timing of expenditures by practitioners and their patients;
- introduction of new technologies;
- product liability litigation, class action and derivative action litigation, or other litigation;
- the amount and timing of capital expenditures and other costs relating to the expansion of our operations;

- the state of the debt and/or equity markets at the time of any proposed offering we choose to initiate;

- our ability to successfully integrate new acquisitions into our operations;

- government regulation and legal developments regarding LAVIV® and our product candidates in the United States and in the foreign countries in which we may operate in the future; and

- general economic conditions.

As a strategic response to changes in the competitive environment, we may from time to time make pricing, service, technology or marketing decisions or business or technology acquisitions that could have a material adverse effect on our operating results. Due to any of these factors, our operating results may fall below the expectations of securities analysts, stockholders and investors in any future period, which may cause our stock price to decline.

Our failure to comply with extensive governmental regulation may significantly affect our operating results.

Even if we obtain regulatory approval for some or all of our product candidates, we will continue to be subject to extensive ongoing requirements by the FDA, as well as by a number of foreign, national, state and local agencies. These regulations will impact many aspects of our operations, including testing, research and development, manufacturing, safety, efficacy, labeling, storage, quality control, adverse event reporting, import and export, record keeping, approval, distribution, advertising and promotion of our future products. We must also submit new or supplemental applications and obtain FDA approval for certain changes to an approved product, product labeling or manufacturing process. Application holders must also submit advertising and other promotional material to the FDA and report on ongoing clinical trials. The FDA enforces post-marketing regulatory requirements, including the cGMP requirements, through periodic unannounced inspections. We do not know whether we will pass any future FDA inspections. Failure to pass an inspection could disrupt, delay or shut down our manufacturing operations. Failure to comply with applicable regulatory requirements could, among other things, result in:

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- administrative or judicial enforcement actions;
- changes to advertising;
- failure to obtain marketing approvals for our product candidates;
- revocation or suspension of regulatory approvals of products;
- product seizures or recalls;
- court-ordered injunctions;
- import detentions;
- delay, interruption or suspension of product manufacturing, distribution, marketing and sales; or
- civil or criminal sanctions.

The discovery of previously unknown problems with our future products may result in restrictions of the products, including withdrawal from the market. In addition, the FDA may revisit and change its prior determinations with regard to the safety or efficacy of our future products. If the FDA s position changes, we may be required to change our labeling or cease to manufacture and market our future products. Even prior to any formal regulatory action, we could voluntarily decide to cease the distribution and sale or recall any of our future products if concerns about their safety or efficacy develop.

In their regulation of advertising and other promotion, the FDA and the FTC may issue correspondence alleging that some advertising or promotional practices are false, misleading or deceptive. The FDA and FTC are authorized to impose a wide array of sanctions on companies for such advertising and promotion practices, which could result in any of the following:

- incurring substantial expenses, including fines, penalties, legal fees and costs to comply with the FDA s requirements;

- changes in the methods of marketing and selling products;

- taking FDA mandated corrective action, which may include placing advertisements or sending letters to physicians rescinding previous advertisements or promotions; or

- disruption in the distribution of products and loss of sales until compliance with the FDA s position is obtained.

Improper promotional activities may also lead to investigations by federal or state prosecutors, and result in criminal and civil penalties. If we become subject to any of the above requirements, it could be damaging to our reputation and restrict our ability to sell or market our future products, and our business condition could be adversely affected. We may also incur significant expenses in defending ourselves.

Physicians may prescribe pharmaceutical or biologic products for uses that are not described in a product s labeling or differ from those tested by us and approved by the FDA. While such off-label uses are common and the FDA does not regulate physicians choice of treatments, the FDA does restrict a manufacturer s communications on the subject of off-label use. Companies cannot promote FDA-approved pharmaceutical or biologic products for off-label uses, but under certain limited circumstances they may disseminate to practitioners articles published in peer-reviewed journals. To the extent allowed by the FDA, we intend to disseminate peer-reviewed articles on our future products to practitioners. If, however, our activities fail to comply with the FDA s regulations or guidelines, we may be subject to warnings from, or enforcement action by, the FDA or other regulatory or law enforcement authorities.

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Our sales, marketing, and scientific/educational grant programs, if any in the future, must also comply with applicable requirements of the anti-fraud and abuse provisions of the Social Security Act, the False Claims Act, the federal anti-kickback law, and similar state laws, each as amended. Pricing and rebate programs must comply with the Medicaid rebate requirements of the Omnibus Budget Reconciliation Act of 1990 and the Veteran s Health Care Act of 1992, each as amended. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. All of these activities are also potentially subject to federal and state consumer protection and unfair competition laws. The distribution of product samples to physicians must comply with the requirements of the Prescription Drug Marketing Act.

Depending on the circumstances, failure to meet post-approval requirements can result in criminal prosecution, fines or other penalties, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, or refusal to allow us to enter into supply contracts, including government contracts. Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity.

We have not declared any dividends on our common stock to date, and we have no intention of declaring dividends in the foreseeable future.

The decision to pay cash dividends on our common stock rests with our Board of Directors and will depend on our earnings, unencumbered cash, capital requirements and financial condition. We do not anticipate declaring any dividends in the foreseeable future, as we intend to use any excess cash to fund our operations. Investors in our common stock should not expect to receive dividend income on their investment, and investors will be dependent on the appreciation of our common stock to earn a return on their investment.

Provisions in our charter documents could prevent or delay stockholders attempts to replace or remove current management.

Our charter documents provide for staggered terms for the members of our Board of Directors. Our Board of Directors is divided into three staggered classes, and each director serves a term of three years. At stockholders meetings, only those directors comprising one of the three classes will have completed their term and be subject to re-election or replacement.

In addition, our Board of Directors is authorized to issue blank check preferred stock, with designations, rights and preferences as they may determine. Accordingly, our Board of Directors has in the past and may in the future, without stockholder approval, issue shares of preferred stock with dividend, liquidation, conversion, voting or other rights that could adversely affect the voting power or other rights of the holders of our common stock. This type of preferred stock could also be issued to discourage, delay or prevent a change in our control.

The use of a staggered Board of Directors and the ability to issue blank check preferred stock are traditional anti-takeover measures. These provisions in our charter documents make it difficult for a majority stockholder to gain control of the Board of Directors and of our company. These provisions may be beneficial to our management and our Board of Directors in a hostile tender offer and may have an adverse impact on stockholders who may want to participate in such a tender offer, or who may want to replace some or all of the members of our Board of Directors.

Provisions in our bylaws provide for indemnification of officers and directors, which could require us to direct funds away from our business and future products.

Our bylaws provide for the indemnification of our officers and directors. We have in the past and may in the future be required to advance costs incurred by an officer or director and to pay judgments, fines and expenses incurred by an officer or director, including reasonable attorneys fees, as a result of actions or proceedings in which our officers and directors are involved by reason of being or having been an officer or director of our company. Funds paid in satisfaction of judgments, fines and expenses may be funds we need for the operation of our business and the development of our product candidates, thereby affecting our ability to attain profitability.

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Future sales of our common stock may depress our stock price.

The market price of our common stock could decline as a result of sales of substantial amounts of our common stock in the public market, or as a result of the perception that these sales could occur, which could occur if we issue a large number of shares of common stock (or securities convertible into our common stock) in connection with a future financing, as our common stock is trading at low levels. These factors could make it more difficult for us to raise funds through future offerings of common stock or other equity securities. As of the date of this report, all of our outstanding shares held by non-affiliates are freely transferable without restriction or further registration under the Securities Act. In addition to our common stock outstanding, as of December 31, 2013, we had warrants and options outstanding that were exercisable for a total of 6,736,487 shares of common stock.

The public trading market for our common stock may not be sustained.

In the past, we have had a limited, volatile and sporadic public trading market for our common stock. Although our common stock was listed on the NYSE MKT in May 2013, an active trading market for our common stock may not be sustained, especially given the large percentage of our common stock held by our affiliates. If an active market for our common stock is not sustained, it may be difficult for our stockholders to sell shares without depressing the market price for our common stock.

The trading price of the shares of our common stock has been highly volatile, and purchasers of our common stock could incur substantial losses.

Our stock began trading on NYSE MKT on May 17, 2013. Between that date and December 31, 2013, our common stock has traded between $3.28 and $7.20. Our stock price could be subject to wide fluctuations in response to a variety of factors, which include:

- whether our clinical human trials relating to the use of autologous cell therapy applications, in particular, for burn scars and vocal cord scars, and such other indications as we may identify and pursue can be conducted within the timeframe that we expect, whether such trials will yield positive results, or whether additional applications for the commercialization of autologous cell therapy can be identified by us and advanced into human clinical trials;

- whether our collaboration with Intrexon can be advanced with positive results within the timeframe and budget that we expect;

- changes in laws or regulations applicable to our products or product candidates, including but not limited to clinical trial requirements for approvals;

- unanticipated serious safety concerns related to the use of our products or product candidates;

- a decision to initiate a clinical trial, not to initiate a clinical trial or to terminate an existing clinical trial;

- our ability to increase our manufacturing capacity and reduce our manufacturing costs through the improvement of our manufacturing process, our ability to validate any such improvements with the relevant regulatory agencies and our ability to accomplish the foregoing on a timely basis, if at all;

- adverse regulatory decisions;

- the introduction of new products or technologies offered by us or our competitors;

- the inability to effectively manage our growth;

- actual or anticipated variations in quarterly operating results;

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- the failure to meet or exceed the estimates and projections of the investment community;
- the perception of the pharmaceutical industry by the public, legislatures, regulators and the investment community;
- the overall performance of the U.S. equity markets and general political and economic conditions;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- additions or departures of key personnel;
- the trading volume of our common stock; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and the stock of biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance.

We will seek to raise additional funds in the future, which may be dilutive to stockholders or impose operational restrictions.

We expect to seek to raise additional capital in the future to help fund our clinical trials, our collaboration efforts with Intrexon and for the development of our proposed products. If we raise additional capital through the issuance of equity or of debt securities, the percentage ownership of our current stockholders will be reduced. We may also enter into strategic transactions, issue equity as part of license issue fees to our licensors, compensate consultants or settle outstanding payables using equity that may be dilutive. Our stockholders may experience additional dilution in net book value per share and any additional equity securities may have rights, preferences and privileges senior to those of the holders of our common stock. If we cannot raise additional funds, we will have to delay our development activities.

We are substantially controlled by our current officers, directors, and principal stockholders.

Currently, our directors, executive officers, and principal stockholder beneficially own approximately 15.3 million shares of our common stock as of May 23, 2014. In addition, two of our seven directors are affiliates of our principal stockholder. As a result, our directors, officers and principal stockholders will be able to exert substantial influence over the election of our Board of Directors and the vote on issues submitted to our stockholders.

Provisions of the warrants issued in connection with certain of our prior financings provide for preferential treatment to the holders of the warrants and could impede a sale of the Company.

The warrants we issued in connection with certain of our prior financings gives each holder the option to receive a cash payment based on a Black-Scholes valuation upon our change of control or upon our failure to be listed on any trading market. We are required, at the warrant holder s option, exercisable at any time concurrently with, or within 30 days after, the announcement of a fundamental transaction, to redeem all or any portion of these warrants from the warrant holder by paying to the holder an amount of cash equal to the Black-Scholes value of the remaining unexercised portion of the warrant on or prior to the date of the consummation of such fundamental transaction.

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If physicians do not follow our established protocols, the efficacy and safety of our product candidates may be adversely affected.

We are dependent on physicians to follow our established protocols both as to the administration and the handling of our product candidates in connection with our clinical trials, and we continue to be dependent on physicians to follow such protocols after our product candidates are commercialized. The treatment protocol requires each physician to verify the patient s name and date of birth with the patient and the patient records immediately prior to injection. In the event more than one patient s cells are delivered to a physician or we deliver the wrong patient s cells to the physician, which has occurred in the past, it is the physician s obligation to follow the treatment protocol and assure that the patient is treated with the correct cells. If the physicians do not follow our protocol, the efficacy and safety of our product candidates may be adversely affected.

We may be liable for product liability claims not covered by insurance.

Physicians who used our facial aesthetic product in the past, or who may use any of our future products, and patients who have been treated by our facial aesthetic product in the past, or who may use any of our future products, may bring product liability claims against us. While we have taken, and continue to take, what we believe are appropriate precautions, we may be unable to avoid significant liability exposure. We currently keep in force product liability insurance, although such insurance may not be adequate to fully cover any potential claims or may lapse in accordance with its terms prior to the assertion of claims. We may be unable to obtain product liability insurance in the future, or we may be unable to do so on acceptable terms. Any insurance we obtain or have obtained in the past may not provide adequate coverage against any asserted claims. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- diversion of management s time and attention;
- expenditure of large amounts of cash on legal fees, expenses and payment of damages;
- decreased demand for our products or any of our future products and services; or
- injury to our reputation.

If we are the subject of any future product liability claims, our business could be adversely affected, and if these claims are in excess of insurance coverage, if any, that we may possess, our financial position will suffer.

Our competitors in the pharmaceutical, medical device and biotechnology industries may have superior products, manufacturing capabilities, financial resources or marketing position.

The human healthcare products and services industry is extremely competitive. Our competitors include major pharmaceutical, medical device and biotechnology companies. Most of these competitors have more extensive research and development and marketing and production capabilities than we do, as well as greater financial resources. Our future success will depend on our ability to develop and market effectively our products against those of our competitors. If our products cannot compete effectively in the marketplace, our results of operations and financial position will suffer.

We are dependent on our key manufacturing, quality and other management personnel, and the loss of any of these individuals could harm our business.

We are dependent on the efforts of our key management and manufacturing and quality staff. The loss of any of these individuals, or our inability to recruit and train additional key personnel in a timely manner, could materially and adversely affect our business and our future prospects. A loss of one or more of our current officers or key personnel could severely and negatively impact our operations. We have employment agreements with our chief executive officer and chief financial officer, but the remainder of our key personnel are employed at-will, and any of them may elect to pursue other opportunities at any time. We have no present intention of obtaining key man life insurance on any of our executive officers or key management personnel.

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We may need to attract, train and retain additional highly qualified senior executives and manufacturing and quality personnel in the future.

In the future, we may need to seek additional senior executives, as well as manufacturing and quality staff members. There is a high demand for highly trained executive, manufacturing and quality personnel in our industry. We do not know whether we will be able to attract, train and retain highly qualified manufacturing and quality personnel in the future, which could have a material adverse effect on our business, financial condition and results of operations.

If we are unable to protect our intellectual property rights or if our intellectual property rights are inadequate for our technology and products and product candidates, our competitive position could be harmed.

Our commercial success will depend in large part on our ability to obtain and maintain patent and other intellectual property protection in the U.S. and other countries with respect to our proprietary technology and products. We rely on trade secret, patent, copyright and trademark laws, and confidentiality, licensing and other agreements with employees and third parties, all of which offer only limited protection. We seek to protect our proprietary position by filing and prosecuting patent applications in the U.S. and abroad related to our novel technologies and products that are important to our business.

The patent positions of biotechnology and pharmaceutical companies generally are highly uncertain, involve complex legal and factual questions and have in recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our patents, including those patent rights licensed to us by third parties, are highly uncertain. The steps we or our licensors have taken to protect our proprietary rights may not be adequate to preclude misappropriation of our proprietary information or infringement of our intellectual property rights, both inside and outside the U.S. Further, the examination process may require us or our licensors to narrow the claims for our pending patent applications, which may limit the scope of patent protection that may be obtained if these applications issue. The rights already granted under any of our currently issued patents or those licensed to us and those that may be granted under future issued patents may not provide us with the proprietary protection or competitive advantages we are seeking. If we or our licensors are unable to obtain and maintain patent protection for our technology and products, or if the scope of the patent protection obtained is not sufficient, our competitors could develop and commercialize technology and products similar or superior to ours, and our ability to successfully commercialize our technology and products may be adversely affected. It is also possible that we or our licensors will fail to identify patentable aspects of inventions made in the course of our development and commercialization activities before it is too late to obtain patent protection on them.

With respect to patent rights, we do not know whether any of the pending patent applications for any of our compounds will result in the issuance of patents that protect our technology or products, or if any of our or our licensors issued patents will effectively prevent others from commercializing competitive technologies and products. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the U.S. and other jurisdictions are typically not published until 18 months after filing or in some cases not at all, until they are issued as a patent. Therefore we cannot be certain that we or our licensors were the first to make the inventions claimed in our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions.

Our issued patents, those that may be issued in the future or those licensed or acquired by us, may be challenged, invalidated or circumvented, and the rights granted under any issued patent may not provide us with proprietary protection or competitive advantages against competitors with similar technology. In particular, we do not know if competitors will be able to design variations on our treatment methods to circumvent our current and anticipated patent claims. Furthermore, competitors may independently develop similar technologies or duplicate any

technology developed by us.

Our pending applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Because the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, issued patents that we own or have licensed from third parties may be challenged in the courts or patent offices in the U.S. and abroad. Such challenges may result in the loss of patent protection, the narrowing of claims in such patents or the invalidity or unenforceability of such

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patents, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection for our technology and products. Protecting against the unauthorized use of our or our licensor s patented technology, trademarks and other intellectual property rights is expensive, difficult and may in some cases not be possible. In some cases, it may be difficult or impossible to detect third-party infringement or misappropriation of our intellectual property rights, even in relation to issued patent claims, and proving any such infringement may be even more difficult.

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could harm our business.

Our commercial success depends upon our ability to develop, manufacture, market and sell LAVIV, and other product candidates, if approved,, and to use our related proprietary technologies. We may become party to, or threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our products or product candidates, including interference or derivation proceedings before the U.S. Patent and Trademark Office, or USPTO. Third parties may assert infringement claims against us based on existing patents or patents that may be granted in the future. If we are found to infringe a third party s intellectual property rights, we could be required to obtain a license from such third party to continue commercializing our products. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Under certain circumstances, we could be forced, including by court order, to cease commercializing our products and then expend time and funding to redesign our product and/or product candidates so that it does not infringe others patents while still allowing us to compete in the market with a substantially similar product. In addition, in any such proceeding or litigation, we could be found liable for monetary damages. A finding of infringement could prevent us from commercializing our products or force us to cease some of our business operations, which could materially harm our business. Any claims by third parties that we have misappropriated their confidential information or trade secrets could have a similar negative impact on our business. In addition, our involvement in any of these proceedings may cause us to incur substantial costs and result in diversion of management and technical personnel. Furthermore, parties making claims against us may be able to obtain injunctive or other equitable relief that could effectively block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us.

While azficel-T is in pre-clinical studies and clinical trials for additional indications, we believe that the use of azficel-T in these pre-clinical studies and clinical trials falls within the scope of the exemptions provided by 35 U.S.C. Section 271(e) in the United States, which exempts from patent infringement liability activities reasonably related to the development and submission of information to the FDA. As azficel-T progresses toward commercialization in the additional indications, the possibility of a patent infringement claim against us increases. We attempt to ensure that azficel-T and the methods we employ to manufacture it, as well as the methods for its use we intend to promote, do not infringe other parties patents and other proprietary rights. There can be no assurance they do not, however, and competitors or other parties may assert that we infringe their proprietary rights in any event.

If we breach our license agreement or collaboration agreement, it could have a material adverse effect on our commercialization efforts.

We have collaborated and may collaborate in the future with other entities on research, development and commercialization activities. Disputes may arise about inventorship and corresponding rights in know-how and inventions resulting from the joint creation or use of intellectual property by us and our subsidiaries, collaborators, partners, licensors and consultants. As a result, we may not be able to maintain our proprietary position.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on all of our product candidates throughout the world would be prohibitively expensive, and our or our licensors intellectual property rights in some countries outside the U.S. can be less extensive than those in the U.S. In addition, the laws and practices of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the U.S. Consequently, we and our licensors may not be able to prevent third parties from practicing our and our licensors inventions in all countries outside the U.S., or from selling or importing products made using our and our licensors inventions in and into the

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U.S. or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products, and may export otherwise infringing products to territories where we or our licensors have patent protection, but where enforcement is not as strong as that in the U.S. These products may compete with our products in jurisdictions where we do not have any issued patents and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our or our licensor s patents or marketing of competing products in violation of our proprietary rights generally in those countries. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business, could put our and our licensors patents at risk of being invalidated or interpreted narrowly and our and our licensors patent applications at risk of not issuing and could provoke third parties to assert claims against us or our licensors. We or our licensors may not prevail in any lawsuits that we or our licensors initiate and the damages or other remedies awarded, if any, may not be commercially meaningful.

The laws of certain foreign countries may not protect our rights to the same extent as the laws of the U.S., and these foreign laws may also be subject to change. For example, methods of treatment and manufacturing processes may not be patentable in certain jurisdictions, and the requirements for patentability may differ in certain countries, particularly developing countries. Furthermore, generic drug manufacturers or other competitors may challenge the scope, validity or enforceability of our or our licensors patents, requiring us or our licensors to engage in complex, lengthy and costly litigation or other proceedings. Generic drug manufacturers may develop, seek approval for, and launch generic versions of our products. Many countries, including European Union countries, India, Japan and China, have compulsory licensing laws under which a patent owner may be compelled under certain circumstances to grant licenses to third parties. In those countries, we and our licensors may have limited remedies if patents are infringed or if we or our licensors are compelled to grant a license to a third party, which could materially diminish the value of those patents. This could limit our potential revenue opportunities. Accordingly, our and our licensors efforts to enforce intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we own or license.

Patent term may be inadequate to protect our competitive position on our products for an adequate amount of time.

Given the amount of time required for the development, testing and regulatory review of new product, such as LAVIV, and products candidates, such as azficel-T, patents protecting such candidates might expire before or shortly after such candidates are commercialized. We expect to seek extensions of patent terms in the U.S. and, if available, in other countries where we are prosecuting patents. In the U.S., the Drug Price Competition and Patent Term Restoration Act of 1984 permits a patent term extension of up to five years beyond the normal expiration of the patent, which is limited to the approved indication (or any additional indications approved during the period of extension). However, the applicable authorities, including the FDA and the USPTO in the U.S., and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to take advantage of our investment in development and clinical trials by referencing our clinical and pre-clinical data and launch their product earlier than might otherwise be the case.

Changes in patent law, including recent patent reform legislation, could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents.

As is the case with other pharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the pharmaceutical industry involve technological and legal complexity, and obtaining and enforcing pharmaceutical patents is costly, time-consuming, and inherently uncertain. Changes in either the patent laws or interpretation of the patent laws in the U.S. and other countries may diminish the value of our patents or narrow the scope of our patent protection. For example, the U.S. Supreme Court has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing

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uncertainty with regard to our and our licensors ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our and our licensors ability to obtain new patents or to enforce existing patents and patents we and our licensors may obtain in the future. Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our and our licensors patent applications and the enforcement or defense of our or our licensors issued patents.

In September 2011, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. In particular, under the Leahy-Smith Act, the U.S. transitioned in March 2013 to a first to file system in which the first inventor to file a patent application will be entitled to the patent. Third parties are allowed to submit prior art before the issuance of a patent by the USPTO and may become involved in opposition, derivation, reexamination, inter-partes review or interference proceedings challenging our patent rights or the patent rights of our licensors. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our or our licensors patent rights, which could adversely affect our competitive position.

The USPTO is currently developing regulations and procedures to govern administration of the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act, and in particular, the first to file provisions, did not become effective until March 16, 2013. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will have on the operation of our business. However, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents and those licensed to us.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submissions, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors fail to maintain the patents and patent applications covering our product candidates, our competitive position would be adversely affected.

If we are unable to protect the confidentiality of our proprietary information and know-how, our competitive position would be impaired.

Some of our technology is unpatented and is maintained by us as trade secrets. In an effort to protect these trade secrets, we require our employees, consultants, collaborators and advisors to execute confidentiality agreements upon the commencement of their relationships with us. These agreements require that all confidential information developed by the individual or made known to the individual by us during the course of the individual s relationship with us be kept confidential and not disclosed to third parties. These agreements, however, may not provide us with adequate protection against improper use or disclosure of confidential information, and these agreements may be breached. Adequate

remedies may not exist in the event of unauthorized use or disclosure of our confidential information. A breach of confidentiality could affect our competitive position. In addition, in some situations, these agreements may conflict with, or be subject to, the rights of third parties with whom our employees, consultants, collaborators or advisors have previous employment or consulting relationships. Also, others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets. The disclosure of our trade secrets would impair our competitive position and may materially harm

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our business, financial condition and results of operations.

We may become involved in lawsuits to protect or enforce our intellectual property, which could be expensive, time consuming and unsuccessful and have a material adverse effect on the success of our business.

Competitors may infringe our patents or misappropriate or otherwise violate our intellectual property rights. To counter infringement or unauthorized use, litigation may be necessary in the future to enforce or defend our intellectual property rights, to protect our trade secrets or to determine the validity and scope of our own intellectual property rights or the proprietary rights of others. Also, third parties may initiate legal proceedings against us or our licensors to challenge the validity or scope of intellectual property rights we own or control. These proceedings can be expensive and time consuming. Many of our current and potential competitors have the ability to dedicate substantially greater resources to defend their intellectual property rights than we can. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property. Litigation could result in substantial costs and diversion of management resources, which could harm our business and financial results. In addition, in an infringement proceeding, a court may decide that a patent owned by or licensed to us is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation proceeding could put one or more of our patents at risk of being invalidated, held unenforceable or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of shares of our common stock.

We may be subject to claims by third parties asserting that our licensors, employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our employees and our licensors employees, including our senior management, were previously employed at universities or at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Some of these employees, including each member of our senior management, executed proprietary rights, non-disclosure and non-competition agreements, or similar agreements, in connection with such previous employment. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such third party. Litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- Others may be able to make compounds that are the same as or similar to LAVIV or our product candidates, but that are not covered by the claims of the patents that we own or have exclusively licensed;

- We or our licensors or any strategic partners might not have been the first to make the inventions covered by the issued patents or pending patent applications that we own or have exclusively licensed;

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- We or our licensors might not have been the first to file patent applications covering certain of our inventions;

- Others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;

- It is possible that our pending patent applications will not lead to issued patents;

- Issued patents that we own or have exclusively licensed may not provide us with any competitive advantages, or may be held invalid or unenforceable as a result of legal challenges;

- Our competitors might conduct research and development activities in the U.S. and other countries that provide a safe harbor from patent infringement claims for certain research and development activities, as well as in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;

- We may not develop additional proprietary technologies that are patentable; and

- The patents of others may have an adverse effect on our business.

Others may challenge our patent or other intellectual property rights or sue us for infringement.

If LAVIV® or any of our potential product candidates were to become the subject of problems related to their efficacy, safety, or otherwise, our revenues from LAVIV® could decrease and our business would be seriously harmed.

LAVIV®, in addition to any other of our potential product candidates that may be approved by the FDA, will be subject to continual review by the FDA, and we cannot assure you that newly discovered or developed safety issues will not arise. With the use of any newly marketed drug by a wider patient population, serious adverse events may occur from time to time that initially do not appear to relate to the drug itself. Any safety issues could cause us to suspend or cease marketing of our approved products, cause us to modify how we market our approved products, subject us to substantial liabilities, and adversely affect our revenues and financial condition. In the event of a withdrawal of LAVIV® from the market, our revenues would decline significantly and our business would be seriously harmed and could fail.

Adoption of LAVIV® for the treatment of the appearance of moderate to severe nasolabial fold wrinkles in adults may be slow or limited for a variety of reasons including the cost we must charge for the treatment, competing therapies and, perceived difficulties in the treatment process. If LAVIV® is not successful in gaining broad acceptance as a treatment option for nasolabial fold wrinkles, our business could be harmed.

The rate of adoption of LAVIV® for nasolabial fold wrinkles will be dependent on several factors, including the cost we must charge for the treatment, educating and training physicians and their offices on the patient treatment process with LAVIV® and autologous cell therapy generally. As a first in class therapy, LAVIV® utilizes a unique treatment approach, which can have associated challenges in practice for physicians. The logistics of the product, the injection technique required and the fact that the product constitutes a patient s own cells represent different challenges for physicians. In addition, the tight manufacturing and injection timelines required for treatment with LAVIV® will require

physicians to adjust practice mechanics, which may result in delay in market adoption of LAVIV® as a preferred therapy. Finally, we increased the price we charge for LAVIV® significantly in the second quarter of 2013, which may reduce demand for LAVIV®.

In order to potentially increase our revenue from the sale of LAVIV® or commercialize any future product candidates, we will need to increase our manufacturing capacity and improve our manufacturing capabilities, which will require significant expenditures and regulatory approval.

We currently have limited manufacturing capacity and we have had limited manufacturing experience with LAVIV®, our Autologous Crème product and our other product candidates. In addition, our current manufacturing process is primarily a manual process. To potentially increase our revenue from the sale of LAVIV® and our Autologous Crème product, and to commercialize any future product candidates, we will need to add manufacturing capacity. We also are developing enhancements and alternatives to our current manual manufacturing process. If we have difficulties in increasing our manufacturing capacity and improving our capabilities, we will be limited in our

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ability to potentially increase our revenue from LAVIV®, our Autologous Crème product, as well as any new product candidates, if they are approved for marketing; and we may not be able to decrease our manufacturing costs. These difficulties could adversely affect our financial performance and damage our reputation. Even if we are successful in developing such enhancements or finding alternatives to our current process, such manufacturing changes will require additional expenditures, for which we may be required to seek external financing. In addition, our ability to increase our manufacturing capacity or modify our manufacturing processes will be subject to additional FDA review and approval.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters and manufacturing operations are located in one location, Exton, Pennsylvania. The Exton, Pennsylvania location is leased and consists of approximately 86,500 square feet. The lease ends March 31, 2023.

Item 3. Legal Proceedings

None.

Item 4. Mine Safety Disclosure

Not applicable.

Part II

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

Market Information

Our common stock trades under the symbol FCSC. Our stock traded on the Over the Counter Bulletin Board (OTCBB) from October 21, 2009 until May 16, 2013. On May 17, 2013 our stock began trading on the NYSE MKT.

The following table provides, for the periods during which we traded on the OTCBB, the high and low bid prices for our common stock. These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission, and may not represent actual transactions. The following table also provides, for the periods during we traded on the NYSE MKT, the high and low sales prices for our common stock. The share prices have been adjusted to give effect to the 1-for-25 reverse stock split effective April 30, 2013.

	High	Low
Year Ended December 31, 2013		
First Quarter	$ 4.25	$ 3.25
Second Quarter prior to May 17, 2013 (the date we began trading on the NYSE MKT)	$ 5.05	$ 3.00
Second Quarter (from May 17, 2013 to June 30, 2013)	$ 7.20	$ 4.50
Third Quarter	$ 6.23	$ 4.10
Fourth Quarter	$ 4.44	$ 3.28
Year Ended December 31, 2012		
First Quarter	$ 12.50	$ 8.00
Second Quarter	$ 10.00	$ 3.25
Third Quarter	$ 6.75	$ 3.50
Fourth Quarter	$ 6.00	$ 3.25
Year Ended December 31, 2011		
First Quarter	$ 23.00	$ 12.50
Second Quarter	$ 44.75	$ 15.50
Third Quarter	$ 22.00	$ 10.75
Fourth Quarter	$ 14.25	$ 9.25

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The closing price of our common stock on May 23, 2014 was $2.82 as reported on the NYSE MKT.

Holders of Record

As of May 23, 2014, there were 40,856,815 shares of our common stock outstanding and held by 88 stockholders of record. As of May 23, 2014, we had no shares of preferred stock outstanding.

Dividends

We have never paid any cash dividends on our common stock and our board of directors does not intend to do so in the foreseeable future. The declaration and payment of dividends in the future, of which there can be no assurance, will be determined by the board of directors in light of conditions then existing, including earnings, financial condition, capital requirements and other factors.

During 2011 and 2012, we had outstanding shares of our Series D and Series E preferred stock. All of these shares were converted into common stock on October 9, 2012. Prior to such conversion, these preferred shares were entitled to certain dividends. There were no cash payments for Series D and Series E preferred stock dividends for 2013 and approximately $0.5 million and $0.6 million in cash payments for 2012 and 2011, respectively.

Recent Sales of Unregistered Securities

All information regarding our issuance of unregistered securities during 2013 have been previously disclosed in current reports we have filed on Form 8-K or in quarterly reports we have filed on Form 10-Q.

On January 10, 2014, we and Intrexon entered into a second amendment (Second Amendment) to the parties Exclusive Channel Collaboration Agreement dated October 5, 2012. In connection with the execution of the Second Amendment, on January 10, 2014, we entered into a Supplemental Stock Issuance Agreement with Intrexon pursuant to which we issued Intrexon 1,024,590 shares of our common stock. The closing of the transaction occurred on January 24, 2014. The shares were issued in a transaction exempt from registration under the Securities Act of 1933, as amended (the Securities Act), in reliance on Section 4(2) thereof. Intrexon represented that it was an accredited investor as defined in Regulation D of the Securities Act. For additional information see Note 14 in the accompanying Notes to the Consolidated Financial Statements included in this amended Form 10-K/A.

Stock Performance Graph

The following graph compares the cumulative total return on our common stock relative to the cumulative total returns of the NASDAQ composite index and the NASDAQ Biotechnology index for the period from October 21, 2009 (date of inception) through December 31, 2013. An investment of $100 (with reinvestment of all dividends) is assumed to have been made in our common stock and in each of the indexes on October 21, 2009 (Fibrocell s date of inception) and its relative performance is tracked through December 31, 2013.

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	As of					
	10/21/09	12/31/09	12/31/10	12/31/11	12/31/12	12/31/13
Fibrocell Science, Inc.	100.00	62.16	27.57	21.62	8.11	8.78
NASDAQ Composite Index	100.00	105.51	123.35	121.13	140.39	194.19
NASDAQ Biotechnology Index	100.00	104.89	120.63	134.88	177.91	294.64

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

Purchases of Equity Securities

We did not repurchase any of our equity securities during the year ended December 31, 2013.

Item 6. Selected Financial Data

The selected financial data presented below was derived from our audited consolidated financial statements and related notes, as amended. The per share data has been retroactively adjusted to reflect the April 30, 2013 reverse stock split.

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	Twelve Months Ended				Since Inception
	12/31/2013 Restated	12/31/2012 Restated	12/31/2011 Restated	12/31/2010	12/31/2009
Income Statement					
Total revenue	200	153		936	330
Cost of sales	8,052	8,355	13	503	182
Gross loss	(7,852)	(8,202)	(13)	433	148
Selling, general and administrative expenses	10,073	12,167	12,795	6,516	2,708
Research and development expenses	12,578	9,021	7,171	5,486	1,823
Warrant revaluation and other finance income (expense)	(1,053)	20,404	2,562	(465)	(319)
Derivative revaluation income		(23)	(5,452)		
Interest expense	2	(1,017)	(1,062)	(1,045)	(247)
Other income (expense)				248	(73)
Loss on extinguishment of debt		(5,617)			
Income (loss) from continuing operations before income tax	(31,554)	(15,643)	(23,931)	(12,831)	(5,022)
Income tax		2,500			
Income (loss) from continuing operations	(31,554)	(13,143)	(23,931)	(12,831)	(5,022)
Loss from discontinued operations, net		(11)	(94)	(49)	(12)
Gain on sale of discontinued operations, net		467			
Net income/(loss)	(31,554)	(12,687)	(24,025)	(12,880)	(5,034)
Net income/(loss) attributable to noncontrolling interest		(24)	(18)	(52)	(16)
Net income/(loss) attributable to common shareholders	(31,554)	(12,711)	(24,043)	(12,932)	(5,050)
Net loss per common share - basic	$ (1.06)	$ (1.42)	$ (10.96)	$ (17.23)	$ (8.78)
Net loss per common share - diluted	$ (1.12)	$ (2.60)	$ (11.04)	$ (17.23)	$ (8.78)
Balance Sheet					
Cash and cash equivalents	60,033	31,346	10,799	868	1,363
Total current assets	61,860	33,156	12,499	1,916	2,383
Total assets	69,014	40,603	20,274	8,278	8,724
Total current liabilities	3,593	1,554	9,612	1,943	837
Warrant liability	15,216	14,515	23,754	8,172	635
Total liabilities	19,348	16,413	36,542	22,281	10,342
Mezzanine preferred stock				1,070	2,511
Total equity/(deficit) and noncontrolling interest	49,666	24,190	(16,268)	(15,073)	(4,129)

We have never paid dividends on our common stock.

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

The following discussion of our consolidated financial condition and results of operations, for the Restated Periods, should be read in conjunction with the consolidated financial statements and the related notes thereto included elsewhere in this Form 10-K/A, as amended. The matters discussed herein contain forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and Section 27A of the Securities Act of 1933, as amended, which involve risks and uncertainties. All statements other than statements of historical information provided herein may be deemed to be forward-looking statements. Without limiting the foregoing, the words believes , anticipates , plans , expects and similar expressions are intended to identify forward-looking statements. Factors that could cause actual results to differ materially from those reflected in the forward-looking statements include, but are not limited to, those discussed in

Item 1A. Risk

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Factors and elsewhere in this report and the risks discussed in our other filings with the SEC. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management s analysis, judgment, belief or expectation only as of the date hereof. Although we believe that our expectations are based on reasonable assumptions, we can give no assurance that our expectations will materialize. We undertake no obligation to publicly revise these forward-looking statements to reflect events or circumstances that arise after the date hereof. Many factors could cause actual results to differ materially from our forward looking statements. Several of these factors include, without limitation:

• whether our clinical human trials relating to the use of autologous cellular therapy applications, in particular, for burn scars and vocal cord scars, and such other indications as we may identify and pursue can be conducted within the timeframe that we expect, whether such trials will yield positive results, or whether additional applications for the commercialization of autologous cellular therapy can be identified by us and advanced into human clinical trials;

• our ability to meet requisite regulations or receive regulatory approvals in the United States, and our ability to retain any regulatory approvals that we may obtain; and the absence of adverse regulatory developments in the United States;

• our ability to increase our manufacturing capacity and reduce our manufacturing costs through the improvement of our manufacturing process, our ability to validate any such improvements with the relevant regulatory agencies and our ability to accomplish the foregoing on a timely basis, if at all;

• new entrance of competitive products or further penetration of existing products in our markets;

• the effect on us from adverse publicity related to our products or the company itself;

• any adverse claims relating to our intellectual property; and

• our dependence on physicians to correctly follow our established protocols for the safe administration of our product.

These factors are not necessarily all of the important factors that could cause actual results of operations to differ materially from those expressed in these forward-looking statements. Other unknown or unpredictable factors also could have material adverse effects on our future results. We cannot assure you that projected results will be achieved.

General

We are an autologous cell therapy company primarily focused on developing first-in-class treatments for skin diseases and conditions with high unmet medical needs. Based on our proprietary autologous fibroblast technology, we are pursuing breakthrough medical applications of azficel-T for restrictive burn scarring and vocal cord scarring. Driving Fibrocell s innovative therapies is its Personalized Biologics platform, which embraces two product engines: the Azficel-T Autologous Fibroblast Product Engine and the Protein Expression Product Engine. These two product engines enable Fibrocell to harness the favorable characteristics of fibroblasts to develop new therapies for diseases and conditions of the skin and connective tissues where there are limited or no treatment options. The Azficel-T Autologous Fibroblast Product Engine is developing biologic solutions for the treatment of serious and debilitating scarring conditions. The Protein Expression Product Engine is creating biologic products by genetically modifying fibroblasts to express target proteins that are inactive or missing from patients with rare genetic skin and tissue disorders.

Our collaboration with Intrexon, a leader in synthetic biology, includes using genetically-modified fibroblasts for treating orphan skin diseases for which there are no currently approved products and exploring the localized treatment of the most common autoimmune skin disease, moderate-to-severe psoriasis. This collaboration with Intrexon is discussed in more detail below. Additional collaborations with the University of California, Los Angeles (UCLA) and the Massachusetts Institute of Technology (MIT) focus on skin-derived stem cells.

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Critical Accounting Policies

The following discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in conformity with U.S. generally accepted accounting principles (GAAP). However, certain accounting policies and estimates are particularly important to the understanding of our financial position and results of operations and require the application of significant judgment by our management or can be materially affected by changes from period to period in economic factors or conditions that are outside of the control of management. As a result they are subject to an inherent degree of uncertainty. In applying these policies, our management uses their judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on our historical operations, our future business plans and projected financial results, the terms of existing contracts, our observance of trends in the industry, information provided by our customers and information available from other outside sources, as appropriate. The following discusses our critical accounting policies and estimates.

Intangible Assets: Intangible assets are research and development assets related to our primary study that was recognized upon emergence from bankruptcy. Amortization commenced in the first quarter of 2012 with the recognition of revenue from the sale of LAVIV®.

Intangibles are tested for recoverability whenever events or changes in circumstances indicate the carrying amount may not be recoverable. The impairment test consists of a comparison of the fair value of the intangible asset to its carrying amount. If the carrying amount exceeds the fair value, an impairment loss is recognized equal in amount to that excess.

Warrant Liability: The Company accounts for stock warrants as either equity instruments or derivative liabilities depending on the specific terms of the warrant agreement. Stock warrants are accounted for as a derivative in accordance with Accounting Standards Codification 815, *Derivatives and Hedging* (ASC 815) if the stock warrants contain down-round protection or other terms that could potentially require net cash settlement and therefore, do not meet the scope exception for treatment as a derivative. Since down-round protection is not an input into the calculation of the fair value of the warrants, the warrants cannot be considered indexed to the Company s own stock which is a requirement for the scope exception as outlined under ASC 815. Warrant instruments that could potentially require net cash settlement in the absence of express language precluding such settlement and those which include down-round provisions are initially classified as derivative liabilities at their estimated fair values, regardless of the likelihood that such instruments will ever be settled in cash. The Company will continue to classify the fair value of the warrants that contain down-round protection and net cash settlement as a liability until the warrants are exercised, expire or are amended in a way that would no longer require these warrants to be classified as a liability.

Revenue Recognition: We recognize revenue over the period LAVIV® is shipped for injection in accordance with ASC 605, *Revenue Recognition* (ASC 605). In general, ASC 605 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists, (2) delivery has occurred or services rendered, (3) the fee is fixed and determinable and (4) collectability is reasonably assured.

Cost of Sales: Cost of sales includes the costs related to the processing of cells for LAVIV®, including direct and indirect costs. These direct costs include the majority of costs incurred in our manufacturing, facility, quality control, and quality assurance operations along with an allocation of overhead costs. The principal reason for the relatively small level of revenue as compared to the cost of sales is that we changed corporate strategy in 2013 to de-emphasize sales of azficel-T into the aesthetic markets, and strategically transition to focus on high-value therapeutic applications for treatment of unmet medical conditions of the skin and connective tissue.

Research and Development Expenses: Research and development costs are expensed as incurred and include salaries and benefits, costs paid to third-party contractors to perform research, conduct clinical trials, develop and manufacture drug materials and delivery devices, and a portion of facilities cost. Clinical trial costs are a significant component of research and development expenses and include costs associated with third-party contractors. Invoicing from third-party contractors for services performed can lag several months. We accrue the costs of services rendered in connection with third-party contractor activities based on our estimate of management fees, site management and

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monitoring costs and data management costs. Actual clinical trial costs may differ from estimated clinical trial costs and are adjusted for in the period in which they become known.

Stock Based Compensation: We account for stock-based awards to employees using the fair value based method to determine compensation for all arrangements where shares of stock or equity instruments are issued for compensation. In addition, we account for stock-based compensation to nonemployees in accordance with the accounting guidance for equity instruments that are issued to other than employees. We use a Black-Scholes option-pricing model to determine the fair value of each option grant as of the date of grant for expense incurred. The Black-Scholes model requires inputs for risk-free interest rate, dividend yield, volatility and expected lives of the options. Expected volatility is based on historical volatility of our common stock and our peer companies. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of the grant. The expected lives for options granted represents the period of time that options granted are expected to be outstanding and is derived from the contractual terms of the options granted. We estimate future forfeitures of options based upon expected forfeiture rates.

Income Taxes: An asset and liability approach is used for financial accounting and reporting for income taxes. Deferred income taxes arise from temporary differences between income tax and financial reporting and principally relate to recognition of revenue and expenses in different periods for financial and tax accounting purposes and are measured using currently enacted tax rates and laws. In addition, a deferred tax asset can be generated by net operating loss (NOL) carryover. If it is more likely than not that some portion or all of a deferred tax asset will not be realized, a valuation allowance is recognized.

Basis of Presentation

The following discussion should be read in conjunction with the Consolidated Financial Statements and the accompanying Notes to the Consolidated Financial Statements included in this Form 10-K/A.

Results of Operations

Comparison of Years Ending December 31, 2013 and 2012 (Restated)

Revenue and Cost of Sales. Revenue and cost of sales were comprised of the following:

	Year ended December 31,		Increase (Decrease)	
($ in thousands)	**2013**	**2012**	**$**	**%**
Total revenue	$ 200	$ 153	$ 47	31%
Cost of sales	8,052	8,355	(303)	(4)%
Gross loss	$ (7,852)	$ (8,202)	$ 350	(4)%

Revenue was approximately $0.2 million for each of the years ended December 31, 2013 and 2012. Revenue is booked based on the shipment of cells to the patients for injection of LAVIV®.

Cost of sales was approximately $8.1 million and $8.4 million for the years ended December 31, 2013 and 2012, respectively. Cost of sales includes the costs related to the processing of cells for LAVIV®, including direct and indirect costs. The cost of sales for the year ended December 31, 2013 was comprised of approximately $3.4 million of compensation and related expense, $3.0 million of laboratory supplies and other related expenses and $1.6 million of rent, utilities, depreciation and amortization. The cost of sales for the year ended December 31, 2012 was comprised of approximately $3.8 million of compensation and related expense, $3.0 million of laboratory supplies and other related expenses and $1.5 million of rent, utilities, depreciation and amortization. Cost of sales decreased mainly due to a reduction in compensation and related expense of $0.3 million coinciding with the reduction of manufacturing personnel employed.

The principal reasons for the relatively small level of revenue as compared to the cost of sales are: (1) We changed corporate strategy in 2013 to de-emphasize sales of azficel-T into the aesthetic markets, and strategically

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transition to focus on high-value therapeutic applications for treatment of unmet medical conditions of the skin and connective tissue; (2) Manufacturing capacity our current manufacturing capacity is limited by the FDA to no more than twenty biopsies a week; (3) Charging for biopsies and injections we offered complimentary and reduced price biopsies and injections throughout 2012 and 2013; and (4) Manufacturing complexity and quality control and assurance criteria. We currently have adequate manufacturing capacity to meet clinical demand and the limited commercial demand we expect for 2014. We believe that cost of sales will remain at or above product revenue for the foreseeable future and, thus, we anticipate that we will continue to report gross losses from sales of LAVIV® for the aesthetic indication for the foreseeable future.

Selling, General and Administrative Expense. Selling, general and administrative expense was comprised of the following:

	Year Ended December 31,		Increase (Decrease)	
($ in thousands)	**2013**	**2012**	**$**	**%**
Compensation and related expense	$ 3,841	$ 4,336	$ (495)	(11)%
External services consulting	935	914	21	2%
Marketing expense	295	2,203	(1,908)	(87)%
License fees	698	664	34	5%
Facilities and related expense and other	4,304	4,050	254	6%
Total selling, general and administrative expense	$ 10,073	$ 12,167	$ (2,094)	(17)%

Selling, general and administrative expense decreased by approximately $2.1 million, or 17%, to $10.1 million for the year ended December 31, 2013 as compared to $12.2 million for the year ended December 31, 2012. Compensation and related expense decreased $0.5 million due to reduced salary and related expense of $0.7 million offset by an increase in severance costs of $0.2 million which were incurred with the reduction of sales and marketing personnel employed. Marketing expense decreased $1.9 million as there was increased spending for the initial launch of LAVIV® during the year ended December 31, 2012. Facilities and related expense and other increased $0.3 million due to an increase of $0.5 million in office costs offset by a decrease in travel costs of $0.2 million. External services consulting and license fees remained relatively constant year over year.

Research and Development Expense.

For each of our research and development programs, we incur both direct and indirect expenses. Direct expenses include third party costs related to these programs such as contract research, consulting, pre-clinical and clinical development costs. Indirect expenses include regulatory, lab costs, personnel, facility, stock compensation and other overhead costs that are not attributable to any one program. We expect research and development costs to continue to be significant for the foreseeable future as a result of our clinical trials and our collaboration with Intrexon.

Research and development expense was comprised of the following:

	Year Ended December 31,		Increase (Decrease)	
($ in thousands)	**2013**	**2012**	**$**	**%**

Direct costs:				
Restrictive Burn Scarring	$ 344	$ 163	$ 181	111%
Vocal Cord Scarring	322	158	164	104%
Recessive Dystrophic Epidermolysis Bullosa	1,773	6,979	(5,206)	(75)%
Morphea Profunda/ Linear Scleroderma	3,570		3,570	
Cutaneous Eosinophilias	3,570		3,570	
azficel-T	1,555	293	1,262	431%
Other	631	554	77	14%
Total direct costs	11,765	8,147	3,618	44%
Indirect costs:				
Regulatory costs	290	357	(67)	(19)%
Indirect lab costs	241	170	71	42%
Compensation and related expense	270	323	(53)	(16)%
Other indirect costs	12	24	(12)	(50)%
Total indirect costs	813	874	(61)	(7)%
Total research and development expense	$ 12,578	$ 9,021	$ 3,557	39%

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Total research and development expense increased $3.6 million to $12.6 million for the year ended December 31, 2013 as compared to $9.0 million for the year ended December 31, 2012. The increase is due primarily to a $3.7 million increase in consulting fees related to research and development costs incurred in the year ended December 31, 2013 in connection with our collaboration with Intrexon offset by a $0.2 million decrease in other spending.

Direct research and development expense by major clinical and pre-clinical development program were as follows:

Restrictive Burn Scarring (RBS) Costs to date on this program are approximately $0.5 million. These funds have been utilized to author and review clinical trial protocols, hire a Contract Research Organization (CRO), recruit investigator sites and initiate recruitment. Going forward, RBS research and development investments will support execution of the Phase II clinical trial, clinical product manufacturing, statistical analyses, report generation and future clinical development.

Vocal Cord Scarring (VCS) Costs to date on this program are approximately $0.5 million. These funds have been utilized to author and review clinical trial protocols, hire a CRO, recruit investigator sites and initiate recruitment. Going forward, VCS research and development investments will support execution of the Phase II clinical trial, clinical product manufacturing, statistical analyses, report generation and future clinical development.

Recessive Dystrophic Epidermolysis Bullosa (RDEB) Costs to date on this program are approximately $8.8 million and include the $6.9 million cost of the 2012 stock issuance in connection with the Channel Agreement with Intrexon. In addition, there were approximately $1.9 million in costs associated with product and assay development. Going forward, RDEB research and development investments will support additional product and assay development, pre-clinical trial execution, key opinion leader development, pre-IND and DNA Recombinant Advisory Committee (RAC) meeting preparation and design and execution of the Phase I clinical trial protocol.

Morphea Profunda / Linear Scleroderma (MP / LS) and Cutaneous Eosinophilias (CE) Costs to date on these programs, which are being co-developed, include the $6.4 million cost of the 2013 supplemental stock issuance in connection with the First Amendment to the Channel Agreement with Intrexon and approximately $0.8 million in early stage pre-clinical development. Going forward, MP / LS and CE research and development investments will support product and assay development, pre-clinical trial execution, key opinion leader development, pre-IND and DNA RAC meeting preparation and design and execution of the Phase I clinical trial protocol.

Azficel-T - Costs to date on this program of approximately $1.8 million represent the costs of process improvements for the production of azficel-T. These process improvements include rapid mycoplasma assay, media optimization, raw material selection assays, cryo-preservative analysis and alternate disassociation enzymes.

Interest Expense. We incurred no interest expense in 2013 as compared to $1.0 million for the year ended December 31, 2012. Our interest expense for the year ended December 31, 2012 was related to our 12.5% notes. The 12.5% notes were either paid or converted into common stock with the close of the financing we completed in October 2012.

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Loss on Extinguishment of Debt. On June 1, 2012, we entered into an exchange agreement with existing note holders pursuant to which we agreed to repay half of each holder s 12.5% promissory notes due June 1, 2012 and exchange the balance of each holder s original note, for (i) a new 12.5% note with a principal amount equal to such balance, and (ii) a five-year warrant to purchase a number of shares of common stock equal to the number of shares of common stock underlying such note on the date of issuance. As a result of the exchange agreement on June 1, 2012, we recorded a loss on extinguishment of the 12.5% notes of $4.1 million and $1.5 million in the consolidated statement of operations due to a significant restructuring of the original debt in June 2012 and December 2012, respectively. The details of the loss included recording the fair value of the embedded conversion option of $1.2 million and the fair value of liability-classified warrants of $4.4 million.

Change in Revaluation of Warrant Liability. During the years ended December 31, 2013 and 2012, respectively, we recorded non-cash expense of $1.1 million and non-cash income of $20.4 million for warrant revaluation and other finance charges in our statements of operations due to a change in the fair value of the warrant liability as a result of a change in our stock price and a change in the contractual life of the warrants.

Change in Revaluation of Derivative Liability. During the year ended December 31, 2012, we recorded non-cash expense of less than $0.1 million for derivative revaluation expense, in our statements of operations, due to the change in the fair value of the derivative liability related to the Series D and E preferred stock financings. In October 2012, this preferred stock was converted to common stock and the related derivative liability was reclassified to stockholders deficit as it no longer required liability classification and accordingly, we did not incur a non-cash expense in 2013 related to the revaluation of the derivative liability.

Deferred Tax Benefit. During the year ended December 31, 2012, we recorded a deferred tax benefit of $2.5 million due to the favorable impact to the computation of the valuation allowance recorded against our net deferred tax asset as a result of the reclassification of the intangible assets recognized upon emergence from bankruptcy as a finite-lived intangible asset. The reclassification freed-up the related deferred tax liability by allowing it to offset our net deferred tax asset before applying the valuation allowance. There was no deferred tax benefit recorded for the year ended December 31, 2013.

Loss from Discontinued Operations. The net loss from discontinued operations for the year ended December 31, 2012 relates to Agera which was sold in the 3rd quarter of 2012.

Gain on Sale of Discontinued Operations. On August 31, 2012 we sold all of the shares of common stock of Agera we held for approximately $1.0 million. As a result of the sale we recorded a gain of approximately $0.4 million, net of tax.

Net Loss. Net loss increased $18.9 million to $31.6 million for the year ended December 31, 2013, as compared to $12.7 million for the year ended December 31, 2012. The increase is primarily due to the change in the warrant revaluation and other finance charges of approximately $21.5 million, as more fully described above, offset by the $0.3 million decrease in cost of sales and the $1.0 million decrease in interest expense.

Comparison of Years Ending December 31, 2012 and 2011(Restated)

Revenue and Cost of Sales. Revenue and cost of sales were comprised of the following:

($ in thousands)	Year ended December 31, 2012	2011	Increase (Decrease) $	%
Total revenue	$ 153	$	$ 153	
Cost of sales	8,355	13	8,342	64169%
Gross loss	$ (8,202)	$ (13)	$ (8,189)	62992%

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Revenue was $0.2 million for the year ended December 31, 2012. Revenue is booked based on the shipment of cells to the patients for injection of LAVIV. We recorded no revenue in the year ended December 31, 2011 as no injections for paying customers had been shipped.

Cost of sales was $8.4 million for the year ended December 31, 2012. Cost of sales includes the costs related to the processing of cells for LAVIV, including direct and indirect costs. The cost of sales for the year ended December 31, 2012 was comprised of $3.8 million of compensation related expenses, $3.2 million of laboratory supplies and other related expenses and $1.4 million of rent, utilities, depreciation and amortization. The principal reasons for the relatively small level of revenue as compared to the large cost of sales are: (1) Timing costs are incurred starting with receipt of a patient s biopsy. Revenue is not recognized until at least three months after receipt of the biopsy, when injections are made ready for shipment to the patient s physician. Injections normally occur four weeks apart so the revenue cycle can be up to nine months or more (three injection sessions); (2) Manufacturing capacity our current manufacturing capacity is no more than twenty biopsies a week; (3) Charging for biopsies and injections we offered complimentary and reduced price biopsies and injections in our introductory period, and (4) Manufacturing complexity and quality control and assurance criteria. We are planning to implement a significant price increase for LAVIV on May 1, 2013. The new price will be $12,000 to the physician for the full treatment.

Selling, General and Administrative Expense. Selling, general and administrative expense was comprised of the following:

($ in thousands)	Year Ended December 31, 2012	2011	Increase (Decrease) $	%
Compensation and related expense	$ 4,336	$ 4,506	$ (170)	(4)%
External services consulting	914	691	223	32%
Marketing expense	2,203	3,809	(1,606)	(42)%
License fees	664	803	(139)	(17)%
Facilities and related expense and other	4,050	2,986	1,064	36%
Total selling, general and administrative expense	$ 12,167	$ 12,795	$ (628)	(5)%

Selling, general and administrative expenses decreased by approximately $0.6 million, or 5%, to $12.2 million for the year ended December 31, 2012 as compared to $12.8 million for the year ended December 31, 2011. The decrease consists primarily of a reduction in marketing expenses of $1.6 million due to significant pre-launch costs occurring in year 2011. Facilities and related expense and other increased as travel increased $0.4 million, corporate expense increased $0.2 million as a result of costs associated with the completion of multiple stock offerings during 2012, office and office related expenses $0.4 million as a result of increased headcount and more biopsy throughput.

Research and Development Expense.

For each of our research and development programs, we incur both direct and indirect expenses. Direct expenses include third party costs related to these programs such as contract research, consulting, pre-clinical and clinical development costs. Indirect expenses include regulatory, lab costs, personnel, facility, stock compensation and other overhead costs that are not attributable to any one program. We expect research and development costs to continue to be significant for the foreseeable future as a result of our clinical trials and our collaboration with Intrexon.

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Research and development expense was comprised of the following:

($ in thousands)	Year Ended December 31, 2012	2011	Increase (Decrease) $	%
Direct costs:				
Restrictive Burn Scarring	$ 163	$ 42	$ 121	288%
Vocal Cord Scarring	158	22	136	618%
Recessive Dystrophic Epidermolysis Bullosa	6,979		6,979	
Morphea Profunda/ Linear Scleroderma				
Cutaneous Eosinophilias				
azficel-T	293	1,141	(848)	(74)%
Other	554	347	207	60%
Total direct costs	8,147	1,552	6,595	425%
Indirect costs:				
Regulatory costs	357	375	(18)	(5)%
Indirect lab costs	170	1,620	(1,450)	(90)%
Compensation and related expense	323	2,108	(1,785)	(85)%
Other indirect costs	24	1,516	(1,492)	(98)%
Total indirect costs	874	5,619	(4,745)	(84)%
Total research and development expense	$ 9,021	$ 7,171	$ 1,850	26%

Total research and development expense increased $1.9 million to $9.0 million for the year ended December 31, 2012 as compared to $7.2 million for the year ended December 31, 2011. The increase is due primarily to a $1.9 million increase in consulting fees related to research and development costs incurred in the year ended December 31, 2013 in connection with our collaboration with Intrexon offset by a $0.2 million decrease in other spending.

Direct research and development expense by major clinical and pre-clinical development program were as follows:

Restrictive Burn Scarring (RBS) Costs to date on this program are approximately $0.5 million. These funds have been utilized to author and review clinical trial protocols, hire a Contract Research Organization (CRO), recruit investigator sites and initiate recruitment. Going forward, RBS research and development investments will support execution of the Phase II clinical trial, clinical product manufacturing, statistical analyses, report generation and future clinical development.

Vocal Cord Scarring (VCS) Costs to date on this program are approximately $0.5 million. These funds have been utilized to author and review clinical trial protocols, hire a CRO, recruit investigator sites and initiate recruitment. Going forward, VCS research and development investments will support execution of the Phase II clinical trial, clinical product manufacturing, statistical analyses, report generation and future clinical development.

Recessive Dystrophic Epidermolysis Bullosa (RDEB) Costs to date on this program are approximately $8.8 million and include the $6.9 million cost of the 2012 stock issuance in connection with the Channel Agreement with Intrexon. In addition, there were approximately $1.9 million in costs associated with product and assay development. Going forward, RDEB research and development investments will support additional product and assay development, pre-clinical trial execution, key opinion leader development, pre-IND and DNA Recombinant Advisory

Committee (RAC) meeting preparation and design and execution of the Phase I clinical trial protocol.

Morphea Profunda / Linear Scleroderma (MP / LS) and Cutaneous Eosinophilias (CE) costs to date on these programs, which are being co-developed, include the $6.4 million cost of the 2013 supplemental stock issuance in connection with the First Amendment to the Channel Agreement with Intrexon and approximately $0.8 million in

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early stage pre-clinical development. Going forward, MP / LS and CE research and development investments will support product and assay development, pre-clinical trial execution, key opinion leader development, pre-IND and DNA RAC meeting preparation and design and execution of the Phase I clinical trial protocol.

Azficel-T - Costs to date on this program of approximately $1.4 million represent the costs of process improvements for the production of azficel-T. These process improvements include rapid mycoplasma assay, media optimization, raw material selection assays, cryo-preservative analysis and alternate disassociation enzymes.

Interest Expense. Interest expense remained relatively constant at approximately $1.1 million for the years ended December 31, 2012 and 2011. Our interest expense for the years ended December 31, 2012 and 2011 is related to our 12.5% notes. The 12.5% notes were either paid or converted into common stock with the close of the October 2012 financing.

Loss on Extinguishment of Debt. On June 1, 2012, we entered into an exchange agreement with existing note holders pursuant to which we agreed to repay half of each holder s 12.5% promissory notes due June 1, 2012 and exchange the balance of each holder s original note, for (i) a new 12.5% note with a principal amount equal to such balance, and (ii) a five-year warrant to purchase a number of shares of common stock equal to the number of shares of common stock underlying such note on the date of issuance. As a result of the exchange agreement on June 1, 2012, we recorded a loss on extinguishment of the 12.5% notes of $4.1 million and $1.5 million in the consolidated statement of operations due to a significant restructuring of the original debt in June 2012 and December 2012, respectively. The details of the loss included recording the fair value of the embedded conversion option of $1.2 million and the fair value of liability-classified warrants of $4.4 million.

Change in Revaluation of Warrant Liability. During the years ended December 31, 2012 and 2011, we recorded non-cash income of $20.4 million and $2.6 million, respectively, for warrant revaluation and other finance charges in our statements of operations due to the change in the fair value of the warrant liability as a result of a change in our stock price and a change in the contractual life of the warrants. In addition, the number of shares underlying the warrants increased in 2012 due to the issuance of our Series E preferred stock, which triggered the anti-dilution protection in the warrants resulting in the lowering of the exercise price of the warrants and the increase in the number of shares underlying such warrants.

Change in Revaluation of Derivative Liability. During the years ended December 31, 2012 and 2011, we recorded non-cash expense of less than $0.1 million and $5.5 million, respectively, for derivative revaluation expense in our statements of operations due to the change in the fair value of the derivative liability related to the Series D and E preferred stock financings. In October 2012, the preferred stock was converted to common stock and the related derivative liability was reclassified to shareholders deficit as it no longer required liability classification.

Deferred Tax Benefit. During the year ended December 31, 2012, we recorded a deferred tax benefit of $2.5 million due to the favorable impact to the computation of the valuation allowance recorded against our net deferred tax asset as a result of the reclassification of the intangible assets recognized upon emergence from bankruptcy as a finite-lived intangible asset. The reclassification freed-up the related deferred tax liability by allowing it to offset our net deferred tax asset before applying the valuation allowance.

Loss from Discontinued Operations. The net loss from discontinued operations for the year ended December 31, 2012 remained relatively constant to the net loss from discontinued operations for the year ended December 31, 2011.

Gain on Sale of Discontinued Operations. On August 31, 2012 we sold all of the shares of common stock of Agera we held for approximately $1.0 million. As a result of the sale we recorded a gain of approximately $0.4 million, net of tax.

Net Loss. Net loss decreased $11.3 million to $12.7 million for the year ended December 31, 2012, as compared to $24.0 million for the year ended December 31, 2011. The decrease is primarily due to the change in the warrant revaluation and other finance charges of approximately $17.8 million, as more fully described above, offset by the $8.3 million increase in cost of sales.

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Liquidity and Capital Resources for Years Ending December 31, 2013, 2012 and 2011(Restated)

We have experienced losses since our inception. As of December 31, 2013, we have an accumulated deficit of $87.1 million. The process of developing and commercializing our product candidates requires significant research and development work and clinical trial work, as well as significant manufacturing and process development efforts. These activities, together with our selling, general and administrative expenses, are expected to continue to result in significant operating losses for the foreseeable future.

The following table summarizes our cash flows from operating, investing and financing activities:

	Year Ended December 31,		
($ in thousands)	**2013**	**2012**	**2011**
Statement of Cash Flows Data:			
Total cash provided by (used in):			
Operating activities	$ (20,075)	$ (22,575)	$ 16,837
Investing activities	(360)	509	(1,570)
Financing activities	49,122	42,613	28,336

Operating Activities. Cash used in operating activities during the year ended December 31, 2013 amounted to $20.1 million, a decrease of $2.5 million over the year ended December 31, 2012. The decrease in our cash used in operating activities over 2012 is primarily due to a $2.0 million increase in operating cash inflows from changes in operating assets and liabilities, mostly related to accounts payable.

Cash used in operating activities during the year ended December 31, 2012 amounted to $22.6 million, an increase of $5.7 million over the year ended December 31, 2011. The increase in our cash used in operating activities over 2011 is primarily due to an increase in net losses (adjusted for non-cash items) of $3.2 million, in addition to operating cash outflows from changes in operating assets and liabilities.

Investing Activities. Cash used in investing activities during the year ended December 31, 2013 amounted to $0.4 million due to the purchase of property and equipment. Cash provided by investing activities during the year ended December 31, 2012 amounted to $0.5 million due to the proceeds from the sale of Agera in the third quarter of 2012 offset by the purchase of property and equipment.

Cash used in investing activities during the year ended December 31, 2011 amounted to $1.6 million due to the purchase of property and equipment for the lab facility in Exton, Pennsylvania in preparation of the launch of LAVIV.

Financing Activities. There were $49.1 million cash proceeds provided by financing activities during the year ended December 31, 2013, as compared to $42.6 million provided by financing activities during the year ended December 31, 2012. During the year ended December 31, 2013, we had net proceeds of $47.1 million from the issuance of common stock related to our October 2013 financing, and received $2.0 million from a common stock subscription receivable. During the year ended December 31, 2012, we raised cash of $52.1 million from the issuance of common stock, preferred stock and warrants, offset primarily by principal debt payments of $4.8 million and dividend payments of $0.5 million. Of the $52.1 million received in 2012, we received $43.0 million in gross proceeds from the October 2012 offering. The remaining $9.1 million

was received during May, June and July of 2012 when we sold to accredited investors in a private placement Series E Convertible Preferred Stock.

There were $28.3 million cash proceeds provided by financing activities during the year ended December 31, 2011. During the year ended December 31, 2011, we raised cash of $30.4 million from the issuance of common stock, preferred stock and warrants offset primarily by principal debt payments of $1.3 million in 2011 and dividend payments of $0.6 million in 2011.

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Working Capital

As of December 31, 2013, we had cash and cash equivalents of $60.0 million and working capital of $58.3 million. We expect to have sufficient cash to operate for at least the next twelve months. In addition, we expect we will require additional financing prior to our business achieving significant net cash from operations. We would likely raise such additional capital through the issuance of our equity or equity-linked securities, which may result in dilution to our investors, or by entering into strategic partnerships. Our ability to raise additional capital is dependent on, among other things, the state of the financial markets at the time of any proposed offering. To secure funding through strategic partnerships, it may be necessary to partner one or more of our technologies at an earlier stage of development, which could cause us to share a greater portion of the potential future economic value of those programs with our partners. There is no assurance that additional funding, through any of the aforementioned means, will be available on acceptable terms, or at all. If adequate capital cannot be obtained on a timely basis and on satisfactory terms, our operations could be materially negatively impacted.

Factors Affecting Our Capital Resources

Inflation did not have a significant impact on our results during the year ended December 31, 2013, 2012 or 2011.

Off-Balance Sheet Transactions

We do not engage in material off-balance sheet transactions.

Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2013:

		Payments due by period			
($ in thousands)	**Total**	**2014**	**2015 and 2016**	**2017 and 2018**	**2019 and thereafter**
License fee obligations**(1)**	$ 895	$ 525	$ 290	$ 40	$ 40
Operating lease obligations**(2)**	$ 12,251	$ 1,081	$ 2,465	$ 2,509	$ 6,196
Total	$ 13,146	$ 1,606	$ 2,755	$ 2,549	$ 6,236

(1) Obligations for license agreement with the University of California, Los Angeles (UCLA) and sponsored research agreement with the Massachusetts Institute of Technology (MIT). The amounts in the table assume the foregoing agreements are continued through their respective terms. The agreements may be terminated at the option of either party. In such event, our obligation would be limited to costs through the date of such termination.

(2) Operating lease obligations are stated based on the amended lease agreement for the office, warehouse and laboratory facilities executed in February 2012.

Historically we have entered into agreements with academic medical institutions and contract research organizations to perform research and development activities and with clinical sites for the treatment of patients under clinical protocols. Such contracts expire at various dates and have differing renewal and expiration clauses.

Collaboration with Related Party

Intrexon is an affiliate of our largest shareholder, NRM VII Holdings I, LLC. In addition, two of our seven directors are also affiliates of NRM VII Holdings I, LLC. On October 5, 2012, we entered into an Exclusive Channel Collaboration Agreement (Channel Agreement) with Intrexon that governs a channel collaboration arrangement. The Channel Agreement grants us an exclusive license to use proprietary technologies and other intellectual property of Intrexon to develop and commercialize certain products in the United States. As

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consideration for our Channel Agreement and related amendments, we issued shares of our common stock to Intrexon. For additional details, see Note 14 in the accompanying financial statements included as part of this Annual Report on Form 10-K/A.

Recently Issued Accounting Pronouncements

There have been no recently issued accounting pronouncements that we believe will have a material impact on our consolidated results of operations, cash flows or financial position upon adoption.

Three Months Ended March 31, 2013 compared to the Three Months Ended March 31, 2012 (Restated)

Revenue and Cost of Sales. Revenue and cost of sales for the three months ended March 31, 2013 and 2012 were comprised of the following:

	Three months ended March 31,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Total revenue	$ 26	$ 16	$ 10	63%
Cost of sales	2,351	1,553	798	51%
Gross (loss)	$ (2,325)	$ (1,537)	$ (788)	51%

Revenue of less than $0.1 million was recognized in the first quarter of 2013 for LAVIV. Revenue is booked based on the shipment of cells to the patients for injection of LAVIV. We booked cost of sales of $2.4 million for the three months ended March 31, 2013. Cost of sales includes the costs related to the processing of cells for LAVIV, including direct and indirect costs. The cost of sales for the three months ended March 31, 2013 comprised $1.1 million of compensation related expenses, $0.9 million of laboratory supplies and other related expenses and $0.4 million of rent, utilities, amortization and depreciation. The cost of sales for the three months ended March 31, 2012 comprised $0.8 million of compensation related expenses, $0.5 million of laboratory supplies and other related expenses and $0.2 million of rent, utilities, amortization and depreciation. The principal reasons for the relatively small level of revenue as compared to the large cost of sales in this quarter are as follows: (1) Charging for biopsies and injections we are offering complimentary and reduced price biopsies and injections, and (2) Manufacturing complexity and quality control and assurance manufacturing for cell therapy products is difficult as a result of logistical issues, significant manual processing, raw materials consistency and significant quality control and assurance. We significantly increased the selling price of LAVIV on May 1, 2013 in order to more closely align product pricing with our cost structure and our limited manufacturing capacity in 2013.

Selling, General and Administrative Expense. Selling, general and administrative expense for the three months ended March 31, 2013 and 2012 were comprised of the following:

	Three months ended March 31,	Increase (Decrease)

	2013	2012	$000s	%
	(in thousands)			
Compensation and related expense	$ 973	$ 1,108	$ (135)	(12)%
External services consulting	213	67	146	218%
Marketing expense	127	1,279	(1,152)	(90)%
Travel	75	207	(132)	(64)%
License fees	166	165	1	0%
Facilities and related expense and other	813	897	(84)	(9)%
Total selling, general and administrative expense	$ 2,367	$ 3,723	$ (1,356)	(36)%

Selling, general and administrative expense decreased $1.4 million to $2.4 million for the three months ended March 31, 2013 as compared to $3.7 million for the three months ended March 31, 2012. There was a decrease in compensation of $0.1 million due primarily to the reduction of sales and marketing personnel employed for the three months ended March 31, 2013. Consulting expenses increased by $0.1 million due to additional legal fees incurred in the three months ended March 31, 2013. There was a decrease in marketing expenses of $1.2 million as there was

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increased spending for the initial launch for the three months ended March 31, 2012 as compared to the three months ended March 31, 2013. License fees remained constant at $0.2 million for the three months ended March 31, 2013 and 2012. Facilities and other expenses decreased $0.1 million.

Research and Development Expense. Research and development expense for the three months ended March 31, 2013 and 2012 were comprised of the following:

	Three months ended March 31,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Compensation and related expense	$ 66	$ 66	$ —	— %
External services consulting	944	390	554	142%
Lab costs and related expense	201	17	184	1,082%
Facilities and related expense and other	1	6	(5)	(83)%
Total research and development expense	$ 1,212	$ 479	$ 733	153%

Research and development expense increased $0.7 million to $1.2 million for the three months ended March 31, 2013 from $0.5 million for the three months ended March 31, 2012. The increase is due primarily to the increase in consulting fees related to research and development costs incurred in the three months ended March 31, 2013 for restrictive burn scars and recessive dystrophic epidermolysis bullosa, as well as costs to develop manufacturing, cell collection and logistical process improvements.

Change in Revaluation of Warrant Liability. During the three months ended March 31, 2013 and 2012, we recorded non-cash warrant income of $1.3 million and $6.9 million, respectively, for warrant revaluation and other finance charges in our statements of operations due to a change in the fair value of the warrant liability as a result of a change in our stock price and a change in the contractual life of the warrants.

Change in Revaluation of Derivative Liability. During the three months ended March 31, 2013, there was no revaluation of the derivative liability as our previously outstanding preferred stock was converted to common stock in the fourth quarter of 2012 and the related derivative liability was reclassified to shareholders deficit as it no longer required the liability classification. During the three months ended March 31, 2012, we recorded non-cash derivative revaluation expense of less than $0.1 million in our statements of operations.

Interest Expense. Interest expense related to our 12.5% notes decreased $0.2 million to no interest expense for the three months ended March 31, 2013 from $0.2 million for the three months ended March 31, 2012. The 12.5% notes were either paid or converted into common stock with the close of the October 2012 financing.

Deferred tax benefit. During the three months ended March 31, 2012, we recorded a deferred tax benefit of $2.5 million due to the favorable impact to the computation of the valuation allowance recorded against our net deferred tax asset as a result of the reclassification of the intangible assets recognized upon emergence from bankruptcy as a finite-lived intangible asset. The restatement freed-up the related deferred tax liability by allowing it to offset our net deferred tax asset before applying the valuation allowance.

Loss from Discontinued Operations. The net loss from discontinued operations for the three months ended March 31, 2013 remained relatively constant to the net loss for the three months ended March 31, 2012.

Net Loss. Net loss increased approximately $8.0 million to a net loss of $4.6 million for the three months ended March 31, 2013, as compared to net income of $3.4 million for the three months ended March 31, 2012 primarily due to the deferred tax benefit realized in the three months ending March 31, 2012, offset by the increase in cost of goods sold and increase in research and development expenses for the three months ending March 31, 2013.

Liquidity and Capital Resources

The following table summarizes our cash flows from operating, investing and financing activities for the three months ended March 31, 2013 and 2012:

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	Three Months Ended March 31,	
	2013	2012
	(in thousands)	
Statement of Cash Flows Data:		
Total cash used in:		
Operating activities	$ (5,059)	$ (6,309)
Investing activities	$ (100)	$ (221)
Financing activities	$	$ (91)

Operating Activities. Cash used in operating activities during the three months ended March 31, 2013 amounted to $5.1 million, a decrease of $1.3 million over the three months ended March 31, 2012. The decrease in our cash used in operating activities over the prior year is primarily due to an decrease in net losses (adjusted for non-cash items) of less than $0.1 million in addition to operating cash inflows from changes in operating assets and liabilities.

Investing Activities. Cash used in investing activities amounted to $0.1 million and $0.2 million for the three months ended March 31, 2013 and 2012, respectively, due to the purchase of equipment for the lab facility in Exton, Pennsylvania.

Financing Activities. There was no cash provided or used for financing activities during the three months ended March 31, 2013. There was $0.1 million cash used in financing activities during the three months ended March 31, 2012 for the payment of dividends.

Working Capital

As of March 31, 2013, we had cash and cash equivalents of $26.2 million and working capital of $26.0 million. As of May 15, 2013, the Company has a subscription receivable of $2.0 million due from one foreign investor related to the October 2012 financing. We expect to have sufficient cash to operate for at least the next twelve months. However, we may require additional financing to complete the burn scars and vocal scars clinical trials we intend to commence in 2013. In addition, we expect we will require additional financing prior to our business achieving significant net cash from operations. We would likely raise such additional capital through the issuance of our equity or equity-linked securities, which may result in dilution to our investors, or by entering into strategic partnerships. Our ability to raise additional capital is dependent on, among other things, the state of the financial markets at the time of any proposed offering. To secure funding through strategic partnerships, it may be necessary to partner one or more of our technologies at an earlier stage of development, which could cause us to share a greater portion of the potential future economic value of those programs with our partners. There is no assurance that additional funding, through any of the aforementioned means, will be available on acceptable terms, or at all. If adequate capital cannot be obtained on a timely basis and on satisfactory terms, our operations could be materially negatively impacted.

Three Months Ended June 30, 2013 compared to the Three Months Ended June 30, 2012 (Restated)

Revenue and Cost of Sales. Revenue and cost of sales for the three months ended June 30, 2013 and 2012 were comprised of the following:

	Three months ended June 30,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Total revenue	$ 62	$ 28	$ 34	121%
Cost of sales	2,242	2,094	148	7%
Gross loss	$ (2,180)	$ (2,066)	$ (114)	6%

Revenue of less than $0.1 million was recognized for the three months ended June 30, 2013 for LAVIV. Revenue is booked based on the shipment of cells to the patients for injection of LAVIV. We booked cost of sales of $2.2 million for the three months ended June 30, 2013. Cost of sales primarily includes the costs related to the processing of cells for LAVIV, including direct and indirect costs. The cost of sales for the three months ended June 30, 2013 comprised $0.9 million of compensation related expenses, $0.9 million of laboratory supplies and other related expenses and $0.4 million of rent, utilities, amortization and depreciation. The cost of sales for the three months ended June 30, 2012 comprised $0.9 million of compensation related expenses, $0.9 million of laboratory supplies and other related expenses and $0.3 million of rent, utilities, amortization and depreciation. The

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principal reasons for the relatively small level of revenue as compared to the large cost of sales in this quarter are as follows: (1) Charging for biopsies and injections we are offering complimentary and reduced price biopsies and injections, and (2) Manufacturing complexity and quality control and assurance manufacturing for cell therapy products is difficult as a result of significant manual processing, raw materials consistency, logistical issues, and significant quality control and assurance. We significantly increased the selling price of LAVIV on May 1, 2013 in order to more closely align product pricing with our cost structure and our limited manufacturing capacity in 2013. We will have limited manufacturing capacity for the foreseeable future, and this capacity needs to address both commercial sales of LAVIV and the clinical research programs. As a result, we will not be generating significant revenue from the sales of LAVIV. We also believe that cost of sales will remain significantly higher than revenue for the foreseeable future and, thus, we anticipate the company will be generating gross losses for the foreseeable future.

Selling, General and Administrative Expense. Selling, general and administrative expense for the three months ended June 30, 2013 and 2012 were comprised of the following:

	Three months ended June 30,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Compensation and related expense	$ 643	$ 1,059	$ (416)	(39)%
External services consulting	35	287	(252)	(88)%
Legal expense	209	186	23	12%
Marketing expense	162	582	(420)	(72)%
Travel	99	131	(32)	(24)%
License fees	177	169	8	5%
Facilities and related expense and other	1,125	825	300	36%
Total selling, general and administrative expense	$ 2,450	$ 3,239	$ (789)	(24)%

Selling, general and administrative expense decreased $0.8 million to $2.5 million for the three months ended June 30, 2013 as compared to $3.2 million for the three months ended June 30, 2012. There was a decrease in compensation expense of $0.4 million due primarily to the reduction of sales and marketing personnel employed for the three months ended June 30, 2013. Consulting expenses decreased $0.3 million from $0.3 million for the three months ended June 30, 2012 to less than $0.1 million for the three months ended June 30, 2013. There was a decrease in marketing expenses of $0.4 million as there was increased spending for the initial launch for the three months ended June 30, 2012 as compared to the three months ended June 30, 2013. License fees remained constant at $0.2 million for the three months ended June 30, 2013and 2012. Facilities and other expenses increased $0.3 million.

*Research and Development Expense.*Research and development expense for the three months ended June 30, 2013 and 2012 were comprised of the following:

	Three months ended June 30,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Compensation and related expense	$ 62	$ 105	$ (43)	(40)%
External services consulting	1,080	265	815	308%
Lab costs and related expense	36	16	20	125%
Facilities and related expense and other	6	2	4	200%
Total research and development expense	$ 1,184	$ 388	$ 796	205%

Research and development expense increased $0.8 million to $1.2 million for the three months ended June 30, 2013 from $0.4 million for the three months ended June 30, 2012. The increase is due primarily to the increase in consulting fees related to research and development costs incurred in the three months ended June 30, 2013 in connection with our collaboration with Intrexon Corporation. We expect research and development costs to continue to be significant for the foreseeable future as a result of our clinical trials and our collaboration with Intrexon Corporation.

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Change in Revaluation of Warrant Liability. During the three months ended June 30, 2013 and 2012, we recorded non-cash warrant expense of $8.8 million and non-cash warrant income of $0.9 million for warrant revaluation and other finance charges in our statements of operations due to a change in the fair value of the warrant liability as a result of a change in our stock price and a change in the contractual life of the warrants.

Change in Revaluation of Derivative Liability. During the three months ended June 30, 2013, there was no revaluation of the derivative liability as our previously outstanding preferred stock was converted to common stock in the fourth quarter of 2012 and the related derivative liability was reclassified to shareholders deficit as it no longer required the liability classification. During the three months ended June 30, 2012, we recorded non-cash derivative revaluation expense of less than $2.0 million in our statements of operations.

*Interest Expense.*Interest expense related to our 12.5% notes decreased $0.2 million to no interest expense for the three months ended June 30, 2013 from $0.2 million for the three months ended June 30, 2012. The 12.5% notes were either paid or converted into common stock with the close of the October 2012 financing.

Loss on Extinguishment of debt. On June 1, 2012, we entered into an exchange agreement with existing note holders pursuant to which we agreed to repay half of each holder s 12.5% promissory notes due June 1, 2012 and exchange the balance of each holder s original note, for (i) a new 12.5% note with a principal amount equal to such balance, and (ii) a five-year warrant to purchase a number of shares of common stock equal to the number of shares of common stock underlying such note on the date of issuance. As a result of the exchange agreement on June 1, 2012, we recorded a loss on extinguishment of the 12.5% notes of $4.1 million and $1.5 million in the consolidated statement of operations due to a significant restructuring of the original debt in June 2012 and December 2012, respectively. The details of the loss included recording the fair value of the embedded conversion option of $1.2 million and the fair value of liability-classified warrants of $4.4 million.

Loss from Discontinued Operations. The net loss from discontinued operations for the three months ended June 30, 2013 remained relatively constant to the net loss for the three months ended June 30, 2012.

Net Loss. Net loss decreased approximately $3.5 million to a net loss of $14.6 million for the three months ended June 30, 2013, as compared to a net loss of $11.1 million for the three months ended June 30, 2012. The change is primarily due to the changes in warrant and derivative revaluation as more fully described above, as well as the extinguishment of debt in the three months ended June 30, 2012. In addition there was a decrease in selling, general and administrative expenses, offset by the increase in cost of goods sold and increase in research and development expenses for the three months ending June 30, 2013.

Working Capital

As of June 30, 2013, we had cash and cash equivalents of $20.8 million and working capital of $20.5 million. We received the subscription receivable of $2.0 million in July 2013. We expect to have sufficient cash to operate for at least the next twelve months. However, we will require additional financing to complete the burn scar clinical trial, which has commenced and is currently in the patient enrollment stage, the vocal scar clinical trial which we intend to commence in 2013 and advance our collaboration with Intrexon Corporation, if successful on any of the indications being researched, into clinical studies. In addition, we expect we will require additional financing prior to our business achieving significant net cash from operations. We would likely raise such additional capital through the issuance of our equity or equity-linked securities,

which may result in dilution to our investors, or by entering into strategic partnerships. Our ability to raise additional capital is dependent on, among other things, the state of the financial markets at the time of any proposed offering. To secure funding through strategic partnerships, it may be necessary to partner one or more of our technologies at an earlier stage of development, which could cause us to share a greater portion of the potential future economic value of those programs with our partners. There is no assurance that additional funding, through any of the aforementioned means, will be available on acceptable terms, or at all. If adequate capital cannot be obtained on a timely basis and on satisfactory terms, our operations could be materially negatively impacted.

Six Months Ended June 30, 2013 compared to the Six Months Ended June 30, 2012 (Restated)

Revenue and Cost of Sales. Revenue and cost of sales for the six months ended June 30, 2013 and 2012 were comprised of the following:

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	Six months ended June 30,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Total revenue	$ 88	$ 44	$ 44	100%
Cost of sales	4,593	3,648	945	26%
Gross loss	$ (4,505)	$ (3,604)	$ (901)	25%

Revenue of less than $0.1 million was recognized for the six months ended June 30, 2013 for LAVIV. Revenue is booked based on the shipment of cells to the patients for injection of LAVIV. We booked cost of sales of $4.6 million for the six months ended June 30, 2013. Cost of sales includes the costs related to the processing of cells for LAVIV, including direct and indirect costs. The cost of sales for the six months ended June 30, 2013 comprised $2.0 million of compensation related expenses, $1.8 million of laboratory supplies and other related expenses and $0.8 million of rent, utilities, amortization and depreciation. The cost of sales for the six months ended June 30, 2012 comprised $1.7 million of compensation related expenses, $1.2 million of laboratory supplies and other related expenses and $0.7 million of rent, utilities, amortization and depreciation. The principal reasons for the relatively small level of revenue as compared to the large cost of sales in these quarters are as follows: (1) Charging for biopsies and injections we are offering complimentary and reduced price biopsies and injections, and (2) Manufacturing complexity and quality control and assurance manufacturing for cell therapy products is difficult as a result of logistical issues, significant manual processing, raw materials consistency and significant quality control and assurance.We significantly increased the selling price of LAVIV on May 1, 2013 in order to more closely align product pricing with our cost structure and our limited manufacturing capacity in 2013. We will have limited manufacturing capacity for the foreseeable future, and this capacity needs to address both commercial sales of LAVIV and the clinical research programs. As a result, we will not be generating significant revenue from the sales of LAVIV. We also believe that cost of sales will remain significantly higher than revenue for the foreseeable future and, thus, we anticipate the company will be generating gross losses for the foreseeable future.

*Selling, General and Administrative Expense.*Selling, general and administrative expense for the six months ended June 30, 2013 and 2012 were comprised of the following:

	Six months ended June 30,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Compensation and related expense	$ 1,616	$ 2,168	$ (552)	(25)%
External services consulting	55	319	(264)	(83)%
Legal expense	402	222	180	81%
Marketing expense	289	1,850	(1,561)	(84)%
Travel	174	338	(164)	(49)%
License fees	343	333	10	3%
Facilities and related expense and other	1,938	1,732	206	12%
Total selling, general and administrative expense	$ 4,817	$ 6,962	$ (2,145)	(31)%

Selling, general and administrative expense decreased $2.1 million to $4.8 million for the six months ended June 30, 2013 as compared to $6.9 million for the six months ended June 30, 2012. There was a decrease in compensation expense of $0.6 million due primarily to the reduction of sales and marketing personnel employed for the six months ended June 30, 2013. Consulting expenses decreased by $0.3 million. Legal fees increased by $0.2 million due to additional legal fees incurred in the six months ended June 30, 2013. There was a decrease in marketing expenses of $1.6 million as there was increased spending for the initial launch for the six months ended June 30, 2012 as compared to the six months ended June 30, 2013. License fees remained constant at $0.3 million for the six months ended June 30, 2013 and 2012. Facilities and other expenses increased $0.2 million.

Research and Development Expense. Research and development expense for the six months ended June 30, 2013 and 2012 were comprised of the following:

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	Six months ended June 30,			
	2013	2012	$000s	%
	(in thousands)			
Compensation and related expense	$ 128	$ 170	$ (42)	(25)%
External services consulting	2,024	655	1,369	209%
Lab costs and related expense	237	33	204	618%
Facilities and related expense and other	7	10	(3)	(30)%
Total research and development expense	$ 2,396	$ 868	$ 1,528	176%

Research and development expense increased $1.5 million to $2.4 million for the six months ended June 30, 2013 from $0.9 million for the six months ended June 30, 2012. The increase is due primarily to the increase in consulting fees related to research and development costs incurred in the six months ended June 30, 2013 in connection with our collaboration with Intrexon Corporation. We expect research and development costs to continue to be significant for the foreseeable future as a result of our clinical trials and our collaboration with Intrexon Corporation.

Change in Revaluation of Warrant Liability. During the six months ended June 30, 2013 and 2012, we recorded non-cash warrant expense of $7.5 million and non-cash warrant income of $7.7 million, respectively, for warrant revaluation and other finance charges in our statements of operations due to a change in the fair value of the warrant liability as a result of a change in our stock price and a change in the contractual life of the warrants.

Change in Revaluation of Derivative Liability. During the six months ended June 30, 2013, there was no revaluation of the derivative liability as our previously outstanding preferred stock was converted to common stock in the fourth quarter of 2012 and the related derivative liability was reclassified to shareholders deficit as it no longer required the liability classification. During the six months ended June 30, 2012, we recorded non-cash derivative revaluation expense of $2.0 million in our statements of operations.

Interest Expense. Interest expense related to our 12.5% notes decreased $0.4 million to no interest expense for the six months ended June 30, 2013 from $0.4 million for the six months ended June 30, 2012. The 12.5% notes were either paid or converted into common stock with the close of the October 2012 financing.

Loss on Extinguishment of debt. On June 1, 2012, we entered into an exchange agreement with existing note holders pursuant to which we agreed to repay half of each holder s 12.5% promissory notes due June 1, 2012 and exchange the balance of each holder s original note, for (i) a new 12.5% note with a principal amount equal to such balance, and (ii) a five-year warrant to purchase a number of shares of common stock equal to the number of shares of common stock underlying such note on the date of issuance. As a result of the exchange agreement on June 1, 2012, we recorded a loss on extinguishment of the 12.5% notes of $4.1 million and $1.5 million in the consolidated statement of operations due to a significant restructuring of the original debt in June 2012 and December 2012, respectively. The details of the loss included recording the fair value of the embedded conversion option of $1.2 million and the fair value of liability-classified warrants of $4.4 million.

Deferred tax benefit. During the six months ended June 30, 2012, we recorded a deferred tax benefit of $2.5 million due to the favorable impact to the computation of the valuation allowance recorded against our net deferred tax asset as a result of the reclassification of the intangible assets recognized upon emergence from bankruptcy as a finite-lived intangible asset. The restatement freed-up the related deferred tax liability by allowing it to offset our net deferred tax asset before applying the valuation allowance.

Loss from Discontinued Operations. The net loss from discontinued operations for the six months ended June 30, 2013 remained relatively constant to the net loss for the six months ended June 30, 2012.

Net Loss. Net loss increased approximately $11.5 million to a net loss of $19.2 million for the six months ended June 30, 2013, as compared to a net loss of $7.7 million for the six months ended June 30, 2012. The change is primarily due to the changes in the warrant and derivative revaluations as more fully described above, as well as the extinguishment of debt in the six months ended June 30, 2012. In addition, the deferred tax benefit was realized in the six months ending June 30, 2012, offset by an increase in cost of goods sold and an increase in research and development expenses for the six months ending June 30, 2013.

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Liquidity and Capital Resources

The following table summarizes our cash flows from operating, investing and financing activities for the six months ended June 30, 2013 and 2012:

Statement of Cash Flows Data:	Six months Ended June 30, 2013	2012
	(in thousands)	
Total cash used in:		
Operating activities	$ (10,417)	$ (11,322)
Investing activities	$ (122)	$ (359)
Financing activities	$ 4	$ 3,440

Operating Activities. Cash used in operating activities during the six months ended June 30, 2013 amounted to $10.4 million, a decrease of $0.9 million over the six months ended June 30, 2012. The decrease in our cash used in operating activities over the prior year is primarily due to an decrease in net losses (adjusted for non-cash items) of less than $0.1 million in addition to operating cash inflows from changes in operating assets and liabilities.

Investing Activities. Cash used in investing activities amounted to $0.1 million and $0.4 million for the six months ended June 30, 2013 and 2012, respectively, due to the purchase of equipment for the lab facility in Exton, Pennsylvania.

Financing Activities. A subscription receivable of $4 was received during the six months ending June 30, 2013. There was net $3.4 million cash received from financing activities during the six months ended June 30, 2012 mainly due to the issuance of preferred stock of $7.2 million offset by a debt repayment of $3.5 million.

Working Capital

As of June 30, 2013, we had cash and cash equivalents of $20.8 million and working capital of $20.5 million. We received the subscription receivable of $2.0 million in July 2013. We expect to have sufficient cash to operate for at least the next twelve months. However, we will require additional financing to complete the burn scar clinical trial, which has commenced and is currently in the patient enrollment stage, the vocal scar clinical trial which we intend to commence in 2013 and advance our collaboration with Intrexon Corporation, if successful on any of the indications being researched, into clinical studies. In addition, we expect we will require additional financing prior to our business achieving significant net cash from operations. We would likely raise such additional capital through the issuance of our equity or equity-linked securities, which may result in dilution to our investors, or by entering into strategic partnerships. Our ability to raise additional capital is dependent on, among other things, the state of the financial markets at the time of any proposed offering. To secure funding through strategic partnerships, it may be necessary to partner one or more of our technologies at an earlier stage of development, which could cause us to share a greater portion of the potential future economic value of those programs with our partners. There is no assurance that additional funding, through any of the aforementioned means, will be available on acceptable terms, or at all. If adequate capital cannot be obtained on a timely basis and on satisfactory terms, our operations could be materially negatively impacted.

Three Months Ended September 30, 2013 compared to the Three Months Ended September 30, 2012 (Restated)

Revenue and Cost of Sales. Revenue and cost of sales for the three months ended September 30, 2013 and 2012 were comprised of the following:

	Three months ended September 30,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Total revenue	$ 68	$ 69	$ (1)	(1)%
Cost of sales	1,930	2,321	(391)	(17)%
Gross loss	$ (1,862)	$ (2,252)	$ 390	(17)%

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Revenue of less than $0.1 million was recognized for the three months ended September 30, 2013 for LAVIV. Revenue is booked based on the shipment of cells to the patients for injection of LAVIV. We booked cost of sales of $1.9 million for the three months ended September 30, 2013. Cost of sales primarily includes the costs related to the processing of cells for LAVIV, including direct and indirect costs. The cost of sales for the three months ended September 30, 2013 comprised $0.7 million of compensation related expenses, $0.8 million of laboratory supplies and other related expenses and $0.4 million of rent, utilities, amortization and depreciation. The cost of sales for the three months ended September 30, 2012 comprised $1.0 million of compensation related expenses, $0.9 million of laboratory supplies and other related expenses and $0.4 million of rent, utilities, amortization and depreciation. The principal reasons for the relatively small level of revenue as compared to the large cost of sales in this quarter are as follows: (1) Charging for biopsies and injections we are offering complimentary and reduced price biopsies and injections, and (2) Manufacturing complexity and quality control and assurance manufacturing for our cell therapy products is characterized by significant manual processing, autologous raw materials inconsistencies, logistical challenges, and significant quality control and assurance requirements. We significantly increased the selling price of LAVIV on May 1, 2013 in order to more closely align product pricing with our cost structure and our limited manufacturing capacity in 2013. We will have limited manufacturing capacity for the foreseeable future, with our available capacity addressing both commercial sales of LAVIV and our clinical research programs. As a result, we will not be generating significant revenue from the sales of LAVIV. We also believe that cost of sales will remain significantly higher than revenue for the foreseeable future and, thus, we anticipate the company will continue to report gross losses from sales of LAVIV for the aesthetic indication for the foreseeable future.

Selling, General and Administrative Expense. Selling, general and administrative expense for the three months ended September 30, 2013 and 2012 were comprised of the following:

	Three months ended September 30,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Compensation and related expense	$ 1,277	$ 1,061	$ 216	20%
Severance	170		170	
External services consulting	58	33	25	76%
Legal expense	114	159	(45)	(28)%
Marketing expense	2	224	(222)	(99)%
Travel	65	105	(40)	(38)%
License fees	173	166	7	4%
Facilities and related expense and other	1,043	884	159	18%
Total selling, general and administrative expense	$ 2,902	$ 2,632	$ 270	10%

Selling, general and administrative expense increased $0.3 million to $2.9 million for the three months ended September 30, 2013 as compared to $2.6 million for the three months ended September 30, 2012. There was an increase in compensation expense of $0.2 million due primarily to stock options granted in the third quarter of 2013, offset by the reduction of sales and marketing personnel. There was an increase in severance of $0.2 million. There was a decrease in marketing and travel expenses of $0.3 million as there was increased spending for the initial launch for the three months ended September 30, 2012 as compared to the three months ended September 30, 2013. License fees remained constant at $0.2 million for the three months ended September 30, 2013 and 2012. Facilities and other expenses increased $0.2 million.

Research and Development Expense. Research and development expense for the three months ended September 30, 2013 and 2012 were comprised of the following:

	Three months ended September 30,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Compensation and related expense	$ 70	$ 77	$ (7)	(9)%
External services consulting	8,280	291	7,989	2,745%
Lab costs and related expense	3	58	(55)	(95)%
Facilities and related expense and other	4		4	
Total research and development expense	$ 8,357	$ 426	$ 7,931	1,862%

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Research and development expense increased $7.9 million to $8.4 million for the three months ended September 30, 2013 from $0.4 million for the three months ended September 30, 2012. The increase is due primarily to the increase in consulting fees related to research and development costs incurred in the three months ended September 30, 2013 in connection with our collaboration with Intrexon Corporation. We recorded a fair value of $6.4 million for the shares issued for the Supplemental Stock Issuance Agreement with Intrexon and $1.4 million for reimbursement of work performed by Intrexon for the three months ended September 30, 2013. We expect research and development costs to continue to be significant for the foreseeable future as a result of our clinical trials and our collaboration with Intrexon Corporation.

Change in Revaluation of Warrant Liability. During the three months ended September 30, 2013 and 2012, we recorded non-cash warrant expense of $6.5 million and warrant income of $11.7 million, respectively, for warrant revaluation and other finance charges in our statements of operations due to a change in the fair value of the warrant liability as a result of a change in our stock price and a change in the contractual life of the warrants.

Change in Revaluation of Derivative Liability. During the three months ended September 30, 2013, there was no revaluation of the derivative liability as our previously outstanding preferred stock was converted to common stock in the fourth quarter of 2012 and the related derivative liability was reclassified to shareholders deficit as it no longer required the liability classification. During the three months ended September 30, 2012, we recorded non-cash derivative revaluation income of $1.9 million in our statements of operations.

Interest Expense. There was no interest expense for the three months ended September 30, 2013, compared to $0.1 million for the three months ended September 30, 2012. The 12.5% notes were either paid or converted into common stock with the close of the October 2012 financing.

Loss from Discontinued Operations. The net loss from discontinued operations for the three months ended September 30, 2013 remained relatively constant to the net income from discontinued operations for the three months ended September 30, 2012.

Net Loss. Net loss for the three months ended September 30, 2013 of $6.6 million, as compared to net income for the comparable three-month period in the prior year of $8.6 million, represented a change of approximately $2.0 million. The change is primarily due to the changes in warrant and derivative revaluation as more fully described above, as well as the extinguishment of debt in the three months ended September 30, 2012, offset by the increase in selling, general and administrative expenses and research and development expenses.

Working Capital

As of September 30, 2013, we had cash and cash equivalents of $16.9 million and working capital of $16.6 million. In October 2013, we raised net proceeds of $47.4 million from an equity financing transaction. This, in addition to the September 30, 2013 cash position, is estimated to be sufficient capital to fund our operations into 2015. We expect we will require additional financing prior to our business achieving significant net cash from operations. We would likely raise such additional capital through the issuance of our equity securities, which may result in dilution to our investors, or by entering into strategic partnerships. Our ability to raise additional capital is dependent on, among other things, the state of the financial markets at the time of any proposed offering. To secure funding through strategic partnerships, it may be necessary to partner one or more of our technologies at an earlier stage of development, which could cause us to share a greater portion of the potential future economic value of those programs with our partners. There is no assurance that additional funding, through any of the aforementioned means, will be

available on acceptable terms, or at all. If adequate capital cannot be obtained on a timely basis and on satisfactory terms, our operations could be materially negatively impacted.

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Nine Months Ended September 30, 2013 compared to the Nine Months Ended September 30, 2012 (Restated)

Revenue and Cost of Sales. Revenue and cost of sales for the nine months ended September 30, 2013 and 2012 were comprised of the following:

	Nine months ended September 30,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Total revenue	$ 156	$ 113	$ 43	38%
Cost of sales	6,523	5,968	555	9%
Gross loss	$ (6,367)	$ (5,855)	$ (512)	9%

Revenue of less than $0.2 million was recognized for the nine months ended September 30, 2013 for LAVIV. Revenue is booked based on the shipment of cells to the patients for injection of LAVIV. We booked cost of sales of $6.5 million for the nine months ended September 30, 2013. Cost of sales includes the costs related to the processing of cells for LAVIV, including direct and indirect costs. The cost of sales for the nine months ended September 30, 2013 comprised $2.8 million of compensation related expenses, $2.5 million of laboratory supplies and other related expenses and $1.2 million of rent, utilities, amortization and depreciation. The cost of sales for the nine months ended September 30, 2012 comprised $2.8 million of compensation related expenses, $2.1 million of laboratory supplies and other related expenses and $1.1 million of rent, utilities, amortization and depreciation. The principal reasons for the relatively small level of revenue as compared to the large cost of sales in these quarters are as follows: (1) Charging for biopsies and injections we are offering complimentary and reduced price biopsies and injections, and (2) Manufacturing complexity and quality control and assurance manufacturing for our cell therapy products is characterized by significant manual processing, autologous raw materials inconsistencies, logistical challenges, and significant quality control and assurance requirements. We significantly increased the selling price of LAVIV on May 1, 2013 in order to more closely align product pricing with our cost structure and our limited manufacturing capacity in 2013. We will have limited manufacturing capacity for the foreseeable future, with our available capacity addressing both commercial sales of LAVIV and our clinical research programs. As a result, we will not be generating significant revenue from the sales of LAVIV. We also believe that cost of sales will remain significantly higher than revenue for the foreseeable future and, thus, we anticipate the company will continue to report gross losses from sales of LAVIV for the aesthetic indication for the foreseeable future.

Selling, General and Administrative Expense. Selling, general and administrative expense for the nine months ended September 30, 2013 and 2012 were comprised of the following:

	Nine months ended September 30,		Increase (Decrease)	
	2013	2012	$000s	%
	(in thousands)			
Compensation and related expense	$ 2,893	$ 3,229	$ (336)	(10)%
Severance	170		170	
External services consulting	113	351	(238)	(68)%
Legal expense	517	381	136	36%
Marketing expense	290	2,078	(1,788)	(86)%
Travel	240	443	(203)	(46)%
License fees	516	499	17	3%
Facilities and related expense and other	2,980	2,613	367	14%

Total selling, general and administrative expense	$ 7,719	$ 9,594	$ (1,875)	(20)%

Selling, general and administrative expense decreased $1.9 million to $7.7 million for the nine months ended September 30, 2013 as compared to $9.6 million for the nine months ended September 30, 2012. There was a decrease in compensation expense of $0.3 million due primarily to the reduction of sales and marketing personnel employed for the nine months ended September 30, 2013, offset by the grant of stock options. There was a decrease in marketing expenses of $1.8 million as there was increased spending for the initial launch for the nine months ended September 30, 2012 as compared to the nine months ended September 30, 2013. License fees remained

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constant at $0.5 million for the nine months ended September 30, 2013 and 2012. Facilities and other expenses increased $0.3 million.

Research and Development Expense. Research and development expense for the nine months ended September 30, 2013 and 2012 were comprised of the following:

	Nine months ended September 30,			
	2013	2012	$000s	%
	(in thousands)			
Compensation and related expense	$ 198	$ 247	$ (49)	(20)%
External services consulting	10,305	946	9,359	989%
Lab costs and related expense	239	92	147	160%
Facilities and related expense and other	11	9	2	22%
Total research and development expense	$ 10,753	$ 1,294	$ 9,459	731%

Research and development expense increased $9.5 million to $10.8 million for the nine months ended September 30, 2013 from $1.3 million for the nine months ended September 30, 2012. The increase is due primarily to the increase in consulting fees related to research and development costs incurred in the nine months ended September 30, 2013 in connection with our collaboration with Intrexon Corporation. We recorded a fair value of $6.4 million for the shares issued for the Supplemental Stock Issuance Agreement with Intrexon and $2.4 million for reimbursement of work performed by Intrexon for the nine months ended September 30, 2013. We expect research and development costs to continue to be significant for the foreseeable future as a result of our clinical trials and our collaboration with Intrexon Corporation.

Change in Revaluation of Warrant Liability. During the nine months ended September 30, 2013 and 2012, we recorded non-cash warrant expense of $1.0 million and non-cash warrant income of $19.5 million, respectively, for warrant revaluation and other finance charges in our statements of operations due to a change in the fair value of the warrant liability as a result of a change in our stock price and a change in the contractual life of the warrants.

Change in Revaluation of Derivative Liability. During the nine months ended September 30, 2013, there was no revaluation of the derivative liability as our previously outstanding preferred stock was converted to common stock in the fourth quarter of 2012 and the related derivative liability was reclassified to shareholders deficit as it no longer required the liability classification. During the nine months ended September 30, 2012, we recorded non-cash derivative revaluation expense of less than $0.1 million in our statements of operations.

Interest Expense. There was no interest expense for the nine months ended September 30, 2013, compared to $0.6 million for the nine months ended September 30, 2012. The 12.5% notes were either paid or converted into common stock with the close of the October 2012 financing.

Loss on Extinguishment of debt. On June 1, 2012, we entered into an exchange agreement with existing note holders pursuant to which we agreed to repay half of each holder s 12.5% promissory notes due June 1, 2012 and exchange the balance of each holder s original note, for (i) a new 12.5% note with a principal amount equal to such balance, and (ii) a five-year warrant to purchase a number of shares of common stock equal to the number of shares of common stock underlying such note on the date of issuance. As a result of the exchange agreement on June 1,

2012, we recorded a loss on extinguishment of the 12.5% notes of $4.1 million and $1.5 million in the consolidated statement of operations due to a significant restructuring of the original debt in June 2012 and December 2012, respectively. The details of the loss included recording the fair value of the embedded conversion option of $1.2 million and the fair value of liability-classified warrants of $4.4 million.

Deferred tax benefit. During the nine months ended September 30, 2012, we recorded a deferred tax benefit of $2.5 million due to the favorable impact to the computation of the valuation allowance recorded against our net deferred tax asset as a result of the reclassification of the intangible assets recognized upon emergence from bankruptcy as a finite-lived intangible asset. The restatement freed-up the related deferred tax liability by allowing it to offset our net deferred tax asset before applying the valuation allowance.

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Loss from Discontinued Operations. The net loss from discontinued operations for the nine months ended September 30, 2013 remained relatively constant to the net loss for the nine months ended September 30, 2012.

Net Loss. Net loss for the nine months ended September 30, 2013 of $25.8 million, as compared to a net income for the comparable nine-month period in the prior year of $1.0 million represented a change of approximately $24.8 million. The change is primarily due to the changes in the warrant and derivative revaluations as more fully described above, as well as the extinguishment of debt in the nine months ended September 30, 2012. In addition, the deferred tax benefit was realized in the nine months ending September 30, 2012, offset by an increase in cost of goods sold and an increase in research and development expenses for the nine months ending September 30, 2013.

Liquidity and Capital Resources

The following table summarizes our cash flows from operating, investing and financing activities for the nine months ended September 30, 2013 and 2012:

Statement of Cash Flows Data:	**Nine months Ended September 30, 2013**	**2012**
	(in thousands)	
Cash used in operating activities	$ (16,039)	$ (15,257)
Cash (used) provided in investing activities	$ (162)	$ 529
Cash provided in financing activities	$ 1,730	$ 4,047

Operating Activities. Cash used in operating activities during the nine months ended September 30, 2013 amounted to $16.0 million, an increase of $1.0 million over the nine months ended September 30, 2012. The increase in our cash used in operating activities over the prior year is primarily due to an increase in net losses (adjusted for non-cash items) of approximately $1.0 million.

Investing Activities. Cash used in investing activities amounted to $0.2 million for the nine months ended September 30, 2013, due to the purchase of equipment for the lab facility in Exton, Pennsylvania. Cash provided in investing activities amounted to $0.5 million for the nine months ended September 30, 2012 due to the purchase of equipment for the lab facility in Exton, Pennsylvania, offset by funds received for the sale of Agera.

Financing Activities. Cash provided in financing activities amounted to $1.7 million due to a subscription receivable of $2.0 million received during the nine months ended September 30, 2013, offset by deferred equity costs of $0.3 million related to the financing that closed in October 2013. There was $4.0 million net cash received from financing activities during the nine months ended September 30, 2012 mainly due to the issuance of Series E Preferred Stock of $7.9 million, net of fees, offset by a debt repayment of $3.6 million and $0.3 for dividend payments and fees.

Working Capital

As of September 30, 2013, we had cash and cash equivalents of $16.9 million and working capital of $16.6 million. In October 2013, we raised net proceeds of $47.4 million from an equity financing transaction. This, in addition to the September 30, 2013 cash position, is estimated to be sufficient capital to fund our operations into 2015. We expect we will require additional financing prior to our business achieving significant net cash from operations. We would likely raise such additional capital through the issuance of our equity securities, which may result in dilution to our investors, or by entering into strategic partnerships. Our ability to raise additional capital is dependent on, among other things, the state of the financial markets at the time of any proposed offering. To secure funding through strategic partnerships, it may be necessary to partner one or more of our technologies at an earlier stage of development, which could cause us to share a greater portion of the potential future economic value of those programs with our partners. There is no assurance that additional funding, through any of the aforementioned means, will be available on acceptable terms, or at all. If adequate capital cannot be obtained on a timely basis and on satisfactory terms, our operations could be materially negatively impacted.

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Three Months Ended September 30, 2012 compared to the Three Months Ended September 30, 2011 (Restated)

Revenue and Cost of Sales. Revenue and cost of sales for the three months ended September 30, 2012 and 2011 were comprised of the following:

	Three months ended September 30,		Increase (Decrease)	
	2012	2011	$000s	%
	(in thousands)			
Total revenue	$ 69	$ 0	$ 69	
Cost of sales	2,321	3	(2,318)	
Gross (loss)	$ (2,252)	$ (3)	$ (2,249)	

Revenue of less than $0.1 million was recognized in the third quarter of 2012 for LAVIV. Revenue is booked based on the shipment of cells to the patients for injection of LAVIV. As a result of the increase in LAVIV activity, the Company booked cost of sales of $2.3 million for the three months ended September 30, 2012. Cost of sales includes the costs related to the processing of cells for LAVIV, including direct and indirect costs. The cost of sales for the three months ended September 30, 2012 comprised $1.0 million of compensation related expenses, $0.9 million of laboratory supplies and other related expenses and $0.4 million of rent, utilities, amortization and depreciation. The principal reasons for the relatively small level of revenue as compared to the large cost of sales in this quarter are as follows: (1) Timing costs are incurred starting with receipt of a patient s biopsy. Revenue is not recognized until at least three months after receipt of the biopsy, when injections are made ready for shipment to the patient s physician. Injections normally occur four weeks apart so the revenue cycle can be up to nine months or more (three injection sessions); (2) Manufacturing capacity our current manufacturing capacity is no more than twenty biopsies a week; (3) Charging for biopsies and injections we are offering complimentary and reduced price biopsies and injections in our introductory period, and (4) Volumes our initial staffing is about equal direct to indirect due to the many requirements needed to run a cell processing operation. We anticipate that our direct staffing costs will be a higher percentage of total staffing as we increase volumes and direct labor workers in our manufacturing facility. This should also result in a lower per biopsy cost per indirect worker (as well as a lower per biopsy cost for rent, utilities, depreciation and amortization).

Selling, General and Administrative Expense. Selling, general and administrative expense for the three months ended September 30, 2012 and 2011 were comprised of the following:

	Three months ended September 30,		Increase (Decrease)	
	2012	2011	$000s	%
	(in thousands)			
Compensation and related expense	$ 1,061	$ 752	$ 309	41%
External services consulting	192	130	62	48%
Marketing expense	224	1,556	(1,332)	(86)%
Travel	105	49	56	114%
License fees	166	598	(432)	(72)%
Facilities and related expense and other	884	732	152	21%
Total selling, general and administrative expense	$ 2,632	$ 3,817	$ (1,185)	(31)%

Selling, general and administrative expense decreased $1.2 million to $2.6 million for the three months ended September 30, 2012 as compared to $3.8 million for the three months ended September 30, 2011. There was an increase in compensation of $0.3 million due primarily to the addition of sales and marketing personnel employed for the three months ended September 30, 2012. Consulting expenses increased by $0.1 million due to additional legal fees incurred in the three months ended September 30, 2012. There was a decrease in marketing expenses of $1.3 million as there was increased spending for the large initial launch for the three months ended September 30, 2011 as compared to the three months ended September 30, 2012. License fees decreased $0.4 million for the three months ended September 30, 2012 as compared to the three months ended September 30, 2011. This was due to a $0.6 million FDA annual fee expense recognized in the three months ended September 30, 2011. Facilities and other expenses increased $0.1 million.

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Research and Development Expense. Research and development expense for the three months ended September 30, 2012 and 2011 were comprised of the following:

	Three months ended September 30,		Increase (Decrease)	
	2012	2011	$000s	%
	(in thousands)			
Compensation and related expense	$ 77	$ 494	$ (417)	(84)%
External services consulting	291	497	(206)	(41)%
Lab costs and related expense	58	381	(323)	(85)%
Facilities and related expense and other	0	521	(521)	(100)%
Total research and development expense	$ 426	$ 1,893	$ (1,467)	(77)%

Research and development expense decreased $1.5 million to $0.4 million for the three months ended September 30, 2012 from $1.9 million for the three months ended September 30, 2011. The decrease is due primarily to the classification of costs associated with the production of LAVIV in the three months ended September 30, 2012, recorded in cost of goods sold in the consolidated statement of operations. Research and development costs incurred in the three months ended September 30, 2012 were related to other potential indications for our Fibrocell Therapy, such as acne scars and burn scars as well as costs to develop manufacturing, cell collection and logistical process improvements. Research and development costs incurred in the three months ended September 30, 2011 included costs to bring LAVIV to market.

Interest Expense. Interest expense decreased $0.1 million to approximately $0.2 million for the three months ended September 30, 2012 from $0.3 million for the three months ended September 30, 2011 due to lower debt balances. Pursuant to the terms of the convertible notes we had outstanding during the period, we had been accreting the interest due to the principal on the notes at the rate of 15% per annum.

Change in Revaluation of Warrant and Derivative Liability. During the three months ended September 30, 2012, we recorded a non-cash gain of $11.7 million and $1.9 million for warrant and derivative revaluation, respectively, in our consolidated statements of operations due to the increase in the number of preferred shares and warrants with the issuance of Series E Preferred Stock in our financing completed in July 2012, and the change in fair value. During the three months ended September 30, 2011, we recorded non-cash income of $11.8 million and $2.3 million for warrant revaluation and other finance charges and derivative revaluation income, respectively, in our statements of operations due to a decrease in the fair value of the warrant liability and derivative liability related to the Series A, B and D preferred stock financings. This decrease in fair value was primarily due to a decrease in the price per share of our common stock on September 30, 2011 as compared to June 30, 2011.

Income (Loss) from Discontinued Operations. The net loss from discontinued operations for the three months ended September 30, 2012 remained relatively constant to the net loss for the three months ended September 30, 2011.

Gain on sale of discontinued operations. On August 31, 2012 the Company sold all of the shares of common stock of Agera held by the Company for approximately $1.0 million. As a result of the sale the Company recorded a gain of approximately $0.4 million, net of tax.

Net Income (Loss). Net income increased approximately $0.5 million to net income of $8.6 million for the three months ended September 30, 2012, as compared to net income of $8.1 million for the three months ended September 30,2011 primarily due to the change in the fair value of the warrant liability and derivative liability related to the Series A, B, D and E preferred stock financings, offset by an increase in operating expenses related to the LAVIV product approval in June 2011 and product launch in October 2011.

Working Capital

As of September 30, 2012, we had cash and cash equivalents of $0.1 million and negative working capital of $5.2 million.

On October 9, 2012 we completed a private placement financing with a select group of institutional investors and high net worth individuals for gross proceeds of $45.0 million from the sale of 450 million shares of common stock at a price of $0.10 per share. As of November 6, 2012, we have received $43.0 million in gross proceeds from

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the Offering with the remaining $2.0 million in subscribed proceeds expected to be received by mid-November from a single foreign investor. The cash is expected to last in excess of twelve months.

Nine Months Ended September 30, 2012 compared to the Nine Months Ended September 30, 2011 (Restated)

Revenues and Cost of Sales. Revenue and cost of sales for the nine months ended September 30, 2012 and 2011 were comprised of the following:

	Nine months ended September 30,		Increase (Decrease)	
	2012	2011	$000s	%
	(in thousands)			
Total revenue	$ 113	$ 0	$ 113	
Cost of sales	5,968	3	5,965	198,833%
Gross profit	$ (5,855)	$ (3)	$ (5,852)	195,067%

Revenue of approximately $0.1 million was recognized in the nine months ended September 30, 2012. Revenue is booked based on the shipment of cells to the patients for injection of LAVIV. As a result of the increase in LAVIV activity, the Company booked cost of sales of $6.0 million for the nine months ended September 30, 2012. Cost of sales includes the costs related to the processing of cells for LAVIV, including direct and indirect costs. The cost of sales for the nine months ended September 30, 2012 comprised $2.8 million of compensation related expenses, $2.5 million of laboratory supplies and other related expenses and $0.7 million of rent, utilities, amortization and depreciation. The principal reasons for the relatively small level of revenue as compared to the large cost of sales in the nine month period are as follows: (1) Timing costs are incurred starting with receipt of a patient s biopsy. Revenue is not recognized until at least three months after receipt of the biopsy, when injections are made ready for shipment to the patient s physician. Injections normally occur four weeks apart so the revenue cycle can be up to nine months or more (three injection sessions); (2) Manufacturing capacity our current manufacturing capacity is no more than twenty biopsies a week; (3) Charging for biopsies and injections we are offering complimentary and reduced price biopsies and injections in our introductory period, and (4) Volumes our initial staffing is about equal direct to indirect due to the many requirements needed to run a cell processing operation. We anticipate that our direct staffing costs will be a higher percentage of total staffing as we increase volumes and direct labor workers in our manufacturing facility. This should also result in a lower per biopsy cost per indirect worker (as well as a lower per biopsy cost for rent, utilities and depreciation).

Selling General and Administrative Expense .Selling, general and administrative expense for the nine months ended September 30, 2012 and 2011 were comprised of the following:

	Nine months ended September 30,		Increase (Decrease)	
	2012	2011	$000s	%
	(in thousands)			
Compensation and related expense	$ 3,229	$ 3,654	$ (425)	(12)%
External services consulting	732	517	215	42%
Marketing expense	2,078	2,291	(213)	(9)%
Travel	443	94	349	371%
License fees	499	639	(140)	(22)%

Facilities and related expense and other	2,613	2,063	550	27%
Total selling, general and administrative expense	$ 9,594	$ 9,258	$ 336	4%

Selling, general and administrative expense increased $0.3 million to $9.6 million for the nine months ended September 30, 2012 as compared to $9.3 million for the nine months ended September 30, 2011. There was a decrease in compensation of $0.4 million due to $1.7 million less stock option charges incurred in the period ended September 30, 2012 as compared to the period ended September 30, 2011 offset by increased compensation due to increased personnel for the sales and marketing team for the nine months ended September 30, 2012. Consulting fees increased $0.2 million due to financial advisory service costs that were incurred in the nine months ended September 30, 2012. Marketing expenses decreased $0.2 million while travel expenses increased $0.3 million due to sales force travel related to the product launch. License costs decreased $0.1 million due to the full amount of the 2011 FDA

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annual fee being expensed in the nine months ended September 30, 2011 as compared to the 2012 FDA annual fee being amortized during the nine months ended September 30, 2012. Facilities and other expenses increased $0.5 million to $2.6 million for the nine months ended September 30, 2012 due to additional office supplies and other operating expenses.

Research and Development Expense. Research and development expense for the nine months ended September 30, 2012 and 2011 were comprised of the following:

	Nine months ended September 30,		Increase (Decrease)	
	2012	2011	$000s	%
	(in thousands)			
Compensation and related expense	$ 247	$ 1,489	$ (1,242)	(83)%
External services consulting	946	1,540	(594)	(39)%
Lab costs and related expense	92	1,137	(1,045)	(92)%
Facilities and related expense	9	945	(936)	(99)%
Total research and development expense	$ 1,294	$ 5,111	$ (3,817)	(75)%

Research and development expense decreased $3.8 million to $1.3 million for the nine months ended September 30, 2012 from $5.1 million for the nine months ended September 30, 2011. The decrease is due primarily to the classification of costs associated with the production of LAVIV in the nine months ended September 30, 2012 recorded in cost of goods sold in the consolidated statement of operations. Research and development costs incurred in the nine months ended September 30, 2012 were related to other potential indications for our Fibrocell Therapy, such as acne scars and burn scars as well as costs to develop manufacturing, cell collection and logistical process improvements. Research and development costs incurred in the nine months ended September 30, 2011 included costs incurred to bring LAVIV to market.

Interest Expense. Interest expense for the nine months ended September 30, 2012 decreased $0.2 million to $0.6 million from $0.8 million for the nine months ended September 30, 2011 due to lower debt balances. We have been accreting the interest to principal at the rate of 15% per annum in accordance with the terms of the notes.

Loss on Extinguishment of Debt. During the nine months ended September 30, 2012, the Company recorded a loss on extinguishment of the 12.5% Promissory Note of $4.1 million in the consolidated statement of operations due to a significant modification of the original debt. The details of the loss included recording the fair value of the embedded conversion option of $1.2 million and the fair value of liability-classified warrants of $2.9 million.

Change in Revaluation of Warrant and Derivative Liability. During the nine months ended September 30, 2012, we recorded non-cash income of $19.5 million and less than $0.1 million non-cash loss for the revaluation of the warrant and derivative, respectively, in our statements of operations. The change is due to the increase in the number of preferred shares and warrants with the issuance of Series E Preferred Stock in our financing completed in July 2012, the reset of the exercise price of certain warrants related to the down round protection of such warrants and the change in the fair value of the warrant liability and derivative liability related to the Series A, B and D preferred stock financings. During the nine months ended September 30, 2011, we recorded non-cash income of $4.4 million and a non-cash loss of $5.9 million for warrant income and derivative revaluation expense, respectively, in our statements of operations due to an decrease in the fair value of the warrant liability and derivative liability related to the Series A, B and D preferred stock financings. This decrease in fair value was primarily due to a decrease in the

price per share of our common stock on September 30, 2011 as compared to December 31, 2010.

Loss from Discontinued Operations. The net loss from discontinued operations for the nine months ended September 30, 2012 remained relatively constant to the net loss from discontinued operations for the nine months ended September 30, 2011.

Gain on sale of discontinued operations. On August 31, 2012 the Company sold all of the shares of common stock of Agera held by the Company for approximately $1.0 million. As a result of the sale the Company recorded a gain of approximately $0.4 million, net of tax.

Net Loss. Net loss decreased approximately $22.0 million to a net income of $0.9 million for the nine months ended September 30, 2012, as compared to a net loss of $21.1 million for the nine months ended September 30, 2011

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primarily due to the issuance of additional warrants and to the change in the fair value of the warrant liability and derivative liability related to the Series A, B, D and E preferred stock financings.

Liquidity and Capital Resources

The following table summarizes our cash flows from operating, investing and financing activities for the nine months ended September 30, 2012 and 2011:

Statement of Cash Flows Data:	Nine Months Ended September 30, 2012	2011
	(in thousands)	
Total cash provided by (used in):		
Operating activities	$ (15,257)	$ (12,279)
Investing activities	$ 529	$ (787)
Financing activities	$ 4,047	$ 27,034

Operating Activities. Cash used in operating activities during the nine months ended September 30, 2012 amounted to $15.3 million, an increase of $3.0 million over the nine months ended September 30, 2011. The increase in our cash used in operating activities over the prior year is primarily due to an increase in net losses (adjusted for non-cash items) of $3.2 million due to the hiring of personnel and increased marketing and manufacturing costs related to LAVIV, offset by operating cash inflows from changes in operating assets and liabilities.

Investing Activities. Cash provided by investing activities amounted to $0.5 million for the nine months ended September 30, 2012 due to the sale of Agera offset by purchase of equipment for the lab facility in Exton, Pennsylvania. Cash used amounted to $0.7 million for the nine months ended September 30, 2011 due to the purchase of lab equipment for the Exton facility.

Financing Activities. There was $4.0 million net cash received from financing activities during the nine months ended September 30, 2012 mainly due to the issuance of Series E Preferred Stock of $7.9 million, net of fees, offset by a debt repayment of $3.6 million and $0.3 for dividend payments and fees. There was $27.0 million net cash received from financing activities during the nine months ended September 30, 2011 from the issuance of common stock and preferred stock and the exercise of warrants of $28.9 offset by principal debt payments of $1.3 million and dividend payments of $0.6 million.

Working Capital

As of September 30, 2012, we had cash and cash equivalents of $0.1 million and negative working capital of $5.2 million.

On October 9, 2012 we completed a private placement financing with a select group of institutional investors and high net worth individuals for gross proceeds of $45.0 million from the sale of 450 million shares of common stock at a price of $0.10 per share. As of November 6, 2012, we have received $43.0 million in gross proceeds from the Offering with the remaining $2.0 million in subscribed proceeds expected to be received by mid-November from a single foreign investor. The cash is expected to last in excess of twelve months.

Item 7A. Quantitative and Qualitative Disclosure about Market Risk

The primary objective of our investment activities is to preserve our capital until it is required to fund operations. As of December 31, 2013, we had cash and cash equivalents of $60.0 million. Our exposure to market risk is confined to cash and cash equivalents, which consist of instruments having original maturities of three months or less. Our cash flow and earnings are subject to fluctuations due to changes in interest rates in our investment portfolio.

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Item 8. Financial Statements and Supplementary Data

The financial statements, including the notes thereto and report of the independent registered public accounting firm thereon are included in this report as set forth in the Index to Financial Statements. See F-1 for Index to Consolidated Financial Statements.

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

Not applicable.

Item 9A. Controls and Procedures (Restated)

Evaluation of Disclosure Controls and Procedures

Our management, including our principal executive officer and principal financial officer, evaluated the disclosure controls and procedures related to the recording, processing, summarization and reporting of information in the periodic reports that we file with the SEC. These disclosure controls and procedures have been designed to ensure that (a) material information relating to us, including our consolidated subsidiaries, is made known to management, including these officers, by our other employees, and (b) this information is recorded, processed, summarized, evaluated and reported, as applicable, within the time periods specified in the SEC s rules and forms. Based on their evaluation, including the existence of the material weakness in our internal control over financial reporting referenced below, our management, including our Chief Executive Officer and Chief Financial Officer, concluded that our disclosure controls and procedures were not effective to provide reasonable assurance as of December 31, 2013.

Management s Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in the *Internal Control Integrated Framework* (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America. Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide

reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based on our evaluation under the framework in the Internal Control Integrated Framework (1992), the chief executive officer and chief financial officer concluded that our internal control over financial reporting was not effective as of December 31, 2013. The effectiveness of our internal control over financial reporting as of December 31, 2013 has been audited by BDO USA, LLP, an independent registered public accounting firm, as stated in their report included in this Annual Report on Amended Form 10-K/A in the accompanying Consolidated Financial Statements.

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At the time that our Annual Report on Form 10-K for the year ended December 31, 2013 was filed on March 17, 2014, our Chief Executive Officer and Chief Financial Officer concluded that our internal control over financial reporting was effective as of December 31, 2013. Subsequent to that evaluation, our management, including our Chief Executive Officer and Chief Financial Officer, concluded that we did not maintain effective internal control over financial reporting as of December 31, 2013 because of a material weakness in our internal control over financial reporting described below related to accounting for warrants. Notwithstanding the material weakness described above, management has concluded that our audited consolidated financial statements and unaudited condensed consolidated financial statements for the periods included in this Annual Report on Amended Form 10-K/A are fairly stated in all material respects in accordance with generally accepted accounting principles for each of the periods presented herein.

To respond to this material weakness, we have devoted, and plan to continue to devote, significant effort and resources to the remediation and improvement of our internal control over financial reporting. While we have processes to identify and intelligently apply developments in accounting, we plan to enhance these processes to better evaluate our research and understanding of the nuances of increasingly complex accounting standards. Our plans at this time include providing enhanced access to accounting literature, research materials and documents and increased communication among our personnel and third party professionals with whom we consult regarding complex accounting applications. The elements of our remediation plan can only be accomplished over time and we can offer no assurance that these initiatives will ultimately have the intended effects.

Restatement of Consolidated Financial Statements

On May 6, 2014, Company management, in consultation with its Audit Committee, revised its prior position on accounting for warrants and concluded that its previously issued consolidated financial statements for all periods beginning with the quarterly period ended September 30, 2011 through December 31, 2013 (collectively, the Affected Periods) should not be relied on because of a misapplication in the guidance on accounting for Warrants (as defined in Note 3 of these consolidated financial statements). However, the non-cash adjustments to the financial statements, in all of the Affected Periods, do not impact the amounts previously reported for the Company s cash and cash equivalents, total assets, revenue, or cash flows.

Changes in Internal Controls

Remediation of Prior Year Material Weakness

In Item 9A of the Company s Annual Report on Form 10K for the fiscal year ended December 31, 2012, management reported a material weakness in its internal control over financial reporting.

Specifically, when the Company emerged from bankruptcy in September 2009, an intangible asset was recorded in respect of our primary clinical study on LAVIV®, and the related deferred tax liability was also recorded. In the first quarter of 2012, the Company commercially launched LAVIV®, and commenced generating revenue. As a result, the intangible asset was considered a finite-lived intangible asset and the Company commenced amortizing it over 12 years, and also initiated the amortization of the related deferred tax liability over the same period. In connection with the finalization of our audit for the year ended December 31, 2012, it came to management s attention that the accounting treatment adopted for the deferred tax liability related to the intangible asset in the first quarter of 2012 and for the subsequent second and third

quarters of 2012 was incorrect. Rather than the deferred tax liability being a permanent timing difference for the calculation of deferred tax, we concluded that it would have been more appropriately treated as a temporary timing difference. The impact of this adjustment is that the full deferred tax liability of $2.5 million should have been released to the Consolidated Statement of Operations in the first quarter of 2012.

As a result of this adjustment, it was determined that a control deficiency that constituted a material weakness in the design and operation of our internal control over financial reporting in connection with deferred tax liability relating to the intangible asset was present.

Management s remediation plan to address the material weakness described above was initiated in 2013 and included the following steps taken to strengthen the Company s internal control over financial reporting:

In the past, management has utilized external accounting and taxation advisors to assist us. However, notwithstanding that the specific issue that caused the material weakness no longer exists as a result of the adjustment noted above, due to the fact that an adjustment was still required, management reconsidered the appropriate selection of our external advisors that we utilize for these advisory services. Management selected and engaged a new taxation advisor in 2013.

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Other Changes in Internal Control Over Financial Reporting

Other than the internal control improvement discussed above, there have been no changes in our internal control over financial reporting during the fourth quarter ended December 31, 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

Part III

Item 10. Directors, Executive Officers and Corporate Governance

The following table sets forth the names and ages of all of our directors and executive officers as of April 22, 2014. Our officers are appointed by, and serve at the pleasure of, the Board of Directors.

Name	Title	Age
David Pernock	Chairman of the Board and Chief Executive Officer	59
Gregory Weaver	Chief Financial Officer, Senior Vice President, Treasurer and Corporate Secretary	58
Kelvin Moore	Director	65
Marc Mazur	Director	55
Marcus Smith	Director	59
Julian Kirk	Director	40
Christine St.Clare	Director	63
Douglas J. Swirsky	Director	44

Biographical information with respect to our directors and executive officers is provided below.

David Pernock. Mr. Pernock has served as Chairman of the Board of Fibrocell since September 2009 and as our Chief Executive Officer since February 2010. From December 1993 until November 2009, Mr. Pernock held various positions at GlaxoSmithKline, eventually serving as Senior Vice President of Pharmaceuticals, Vaccines (Biologics), Oncology, Acute Care, and HIV Divisions. From May 2009 until February 2011, Mr. Pernock served as a director of Martek Biosciences Corporation. Mr. Pernock holds a B.S. in Business Administration from Arizona State University. Our Board of Directors concluded that Mr. Pernock should serve as a director of Fibrocell because in his current role as Chief Executive Officer, Mr. Pernock has played a vital role in managing our business and he possesses knowledge about our short- and long-term strategic perspectives. Mr. Pernock serves as a conduit between the Board of Directors and management while overseeing management s efforts to realize the Board s strategic goals.

Gregory Weaver. Mr. Weaver has served as Chief Financial Officer, Senior Vice President, Treasurer and Corporate Secretary of our company since September 2013. From June 2011 to July 2013, Mr. Weaver served as senior vice

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president and chief financial officer of Celsion Corporation, a public biotechnology company, and was a director and chairman of the audit committee of Celsion s Board of Directors from 2005 to 2011. From February 2009 to September 2010, Mr. Weaver served as senior vice president and chief financial officer of Poniard Pharmaceuticals, a public oncology drug development company. From February 2007 to February 2009, Mr. Weaver served as chief financial officer of Talyst, Inc., a private pharmacy information product company. In 2006 and 2007, he served as senior vice president and chief financial officer of Sirna Therapeutics, a public RNA therapeutics company until it was acquired by Merck & Co., Inc. in December 2006. From 2002 to 2005, Mr. Weaver was chief financial officer of Nastech Pharmaceuticals, a public drug delivery company. From 1999 to 2002, Mr. Weaver was chief financial officer of Ilex Oncology Inc., a public oncology drug development company, and from 1996 to 1999, he was chief financial officer of Prism Technologies, a privately-held medical device company. Prior to that, Mr. Weaver held increasingly senior positions with Fidelity Capital and Arthur Andersen LLP. Mr. Weaver currently serves as a director of Atossa Genetics, Inc., a public diagnostics company, and serves on the board of directors and as chairman of the audit committee of Egalet Corporation, a public specialty pharmaceutical company. Mr. Weaver also served as a director and chairman of the audit committee of SCOLR Pharmaceuticals, a public drug delivery company, from 2007 to 2009. Mr. Weaver received an M.B.A. from Boston College and a B.S. in accounting from Trinity University.

Kelvin Moore. Mr. Moore has served as a director of Fibrocell since September 2009. He has 30 years of experience in a wide range of roles within the banking industry. From March 2009 to late 2010, Mr. Moore served as the consultant sales director for the UK based Seaborne Group developing their business in building constructions from converting shipping sea containers. From July 2008 to September 2010, Mr. Moore was a director of Acorn Cultural Developments Limited which is developing a social networking site. Between June 2004 and May 2008, Mr. Moore was a senior advisor with Exit Strategy Planning dealing with the sale of businesses. Currently, he runs his own consulting business providing expertise and mentoring to owners of SMEs. Mr. Moore holds a London University Degree in Geography and Pure Mathematics. Our Board of Directors concluded that Mr. Moore should serve as a director of Fibrocell because of his extensive experience as both a consultant and operating executive, as well as his experience in the banking industry and familiarity with corporate governance and strategic business development and delivery and human resources.

Marc B. Mazur. Mr. Mazur has served as a director of Fibrocell since April 2010. Mr. Mazur currently also serves as an advisor to Brightwood Capital Advisors, a one billion dollar investment fund, and is a member of the board of directors at Brevan Howard, Inc., a global macro hedge fund. From October 2006 until December 2009, Mr. Mazur served as the CEO of Brevan Howard U.S. Asset Management, the U.S. arm of London-based Brevan Howard. In 2001, Mr. Mazur founded Ambassador Capital Group, a privately held investment and advisory entity providing capital, business development and strategic planning advice to companies in the healthcare, financial services and real estate fields. Mr. Mazur received his B.A. in political science from Columbia University in 1981 and a J.D. from Villanova University in 1984. Our Board of Directors concluded that Mr. Mazur should serve as a director of Fibrocell because of his senior executive level experience in finance, healthcare consulting and business strategy, as well as his previous public and private board experience.

Marcus Smith. Mr. Smith has served as a director of our company since October 2012. Mr. Smith joined Third Security, LLC upon its inception and has since been principally responsible for legal matters and transaction execution. From August 1996 to April 2004, Mr. Smith served as Senior Vice President, General Counsel, Secretary and member of the Board of Directors of New River Pharmaceuticals Inc. Mr. Smith received his B.B.A. and his J.D. from the University of Georgia. Our board of directors concluded that Mr. Smith should serve as a director of our company because of his extensive experience in the life sciences and health care fields having served at New River Pharmaceuticals and having an active role as the general counsel at Third Security.

Julian P. Kirk. Mr. Kirk has served as a director of our company since October 2012. Mr. Kirk is a Managing Director of Third Security, LLC, where he has worked since the firm s inception with several portfolio companies of its managed investment funds. He is also involved with the oversight of Third Security, LLC s internal operations. Mr. Kirk has been a member of the Board of Directors of AmpliPhi Biosciences Corporation (OTC: APHB) since June 2013. Since August 2010, he has served on the board of the New River Valley Economic Development Alliance. From October 2006 until December 2011, he served as a member of the Board of Directors of IntelliMat, Inc. and as Co-Chairman of the Board between September 2008 and December 2011. From September 2005 until December 2011, Mr. Kirk served as President of Harvest

Pharmaceuticals Inc. Mr. Kirk also served as Chairman of

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the Board of Managers of ECDS, LLC from June 2008 until March 2010. Mr. Kirk graduated as an Echols Scholar from the University of Virginia. Our board of directors concluded that Mr. Kirk should serve as a director of our company because of his extensive operating and board experience, his experience as the president of Harvest Pharmaceuticals, as well as his responsibilities at Third Security, LLC encompassing corporate oversight of internal operations.

Christine St.Clare. Ms. St.Clare has served as a director of our company since February 2013. Ms. St.Clare recently completed a 35-year career with KPMG where she served a four-year term on the firm s Board of Directors and chaired the board s Audit and Finance Committee. As an Audit Partner, she served as the Engagement Partner for some of KPMG s largest clients. She then assumed the position as an Advisory Partner for the firm s Advisory Practice focusing on the Internal Audit, Risk and Compliance Practice. Concurrently, she was the Partner-in-Charge of the Southeast Consumer Markets practice. She currently serves on the board of directors of Polymer Group, Inc. and serves as the Chair of the audit committee. She also serves on advisory boards of Houlihan Lokey, a midsize global, advisory-focused investment bank, Women Corporate Directors, and Emory University s Goizueta Business School. Our Board of Directors concluded that Ms. St.Clare should serve as a director of Fibrocell because of her deep and broad level of expertise in financial accounting and reporting matters as a former audit partner at KPMG.

Douglas J. Swirsky. Mr. Swirsky has served as a director of our company since March 2013. Since 2013, Mr. Swirsky has served as President and Chief Executive Officer of GenVec, Inc. and also serves as GenVec s principal financial officer. From 2006 through 2013, Mr. Swirsky served as Senior Vice President, Chief Financial Officer, Treasurer and Corporate Secretary of GenVec, Inc. Prior to joining GenVec, Inc. in September 2006, Mr. Swirsky was with Stifel Nicolaus where he served as a Managing Director and the Head of Life Sciences Investment Banking. Mr. Swirsky previously held investment banking positions at UBS, PaineWebber, Morgan Stanley, and Legg Mason. His experience also includes positions in public accounting and consulting. He received his B.S. in Business Administration from Boston University and his M.B.A. from the Kellogg School of Management at Northwestern University. Mr. Swirsky is a Certified Public Accountant and a CFA charterholder. Mr. Swirsky served as a member of the Board of Directors of PolyMedix, Inc. until March 2013. Our Board of Directors concluded that Mr. Swirsky should serve as a director of Fibrocell because of his distinguished career in financial services and corporate management, including his investment banking experience and his role as the principal executive officer and principal financial officer of GenVec, a publicly traded company.

No director is related to any other director or executive officer of our company or our subsidiaries, and, there are no arrangements or understandings between a director and any other person pursuant to which such person was elected as director, except for Messrs. Smith and Kirk who were appointed to our Board of Directors as a condition to the closing of a financing transaction we completed in October 2012.

Our Certificate of Incorporation, as amended, provides that the Board of Directors be divided into three classes. Each director serves a term of three years. At each annual meeting, the stockholders elect directors for a full term or the remainder thereof, as the case may be, to succeed those whose terms have expired. Each director holds office for the term for which elected or until his or her successor is duly elected.

Board Committees

In March 2013, we established a Nominating and Corporate Governance Committee, an Audit Committee and a Compensation Committee. Our Board of Directors has adopted and approved a charter for each of these standing committees. The charters, which include the functions and responsibilities of each of the committees, can be found in the Investors & Media Corporate Governance section on our web site at www.fibrocellscience.com.

Audit Committee. The members of the Audit Committee are Christine St.Clare (Chairperson), Douglas J. Swirsky and Marc Mazur. Each member of the Audit Committee is independent as defined by NYSE MKT listing standards. In addition, each member of the Audit Committee satisfies the additional requirements of the SEC and NYSE MKT for audit committee membership, including the additional independence requirements and the financial literacy requirements. The Board has determined that at least two members of the Audit Committee, Ms. St.Clare and Mr. Swirsky, are audit committee financial experts as defined in the SEC s rules and regulations. The primary purpose of the Audit Committee is to oversee the quality and integrity of our accounting and financial reporting processes

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and the audit of our financial statements. The Audit Committee is responsible for selecting, compensating, overseeing and terminating the selection of our independent registered public accounting firm.

Nominating and Corporate Governance Committee. The members of the Nominating and Corporate Governance Committee are Marc Mazur (Chairperson), Douglas J. Swirsky and Christine St.Clare. Each member of the Nominating and Corporate Governance Committee is independent as defined by NYSE MKT listing standards. The primary functions and responsibilities of the Nominating and Corporate Governance Committee are to: (a) determine the qualifications, qualities, skills, and other expertise required to be a director; (b) identify and screen individuals qualified to become members of the Board; (c) make recommendations to the Board regarding the selection and approval of the nominees for director; and (d) review and assess the adequacy of our corporate governance policies and procedures.

Compensation Committee. The members of the Compensation Committee are Kelvin Moore (Chairperson), Douglas J. Swirsky and Marc Mazur. Each member of the Compensation Committee is independent as defined by NYSE MKT listing standards.

The Compensation Committee is responsible for, among other things, reviewing and making recommendations to the Board of Directors with respect to the annual compensation for our Chief Executive Officer. The Compensation Committee also is responsible for reviewing and approving the annual compensation and benefits for our other executive officers. The Compensation Committee also, among other things, reviews compensation of the Board, reviews and makes recommendations on all new executive compensation programs that are proposed for adoption, and administers the Company s equity incentive plans. The Compensation Committee is responsible for reviewing director compensation for service on the Board and Board committees at least once a year and to recommend any changes to the Board.

The Compensation Committee s charter permits it to delegate any of its responsibilities, along with the authority to take action in relation to such responsibilities, to one or more subcommittees as the Compensation Committee may deem appropriate in its sole discretion. The Compensation Committee may, from time to time, retain and receive advice from compensation consultants. During 2013, the Compensation Committee retained Radford as its compensation consultant to assist in evaluating the compensation programs for 2013. For more information about the Compensation Committee s utilization of Radford, please see the Compensation Discussion and Analysis below.

Our Chief Executive Officer reviews the performance of our other executive officers (other than himself) and, based on that review, our Chief Executive Officer makes recommendations to the Compensation Committee about the compensation of executive officers (other than himself). Our Chief Executive Officer does not participate in any deliberations or approvals by the Board or the Compensation Committee with respect to his own compensation.

Nomination of Director Candidates

We receive suggestions for potential director nominees from many sources, including members of the Board, advisors, and stockholders. Any such nominations, together with appropriate biographical information, should be submitted to the Chairperson of the Nominating and Corporate Governance Committee in the manner discussed below. Any candidates submitted by a stockholder or stockholder group are reviewed and considered in the same manner as all other candidates.

Qualifications for consideration as a Board nominee may vary according to the particular areas of expertise being sought as a complement to the existing board composition. However, minimum qualifications include high level leadership experience in business activities, breadth of knowledge about issues affecting the Company, experience on other boards of directors, preferably public company boards, and time available for meetings and consultation on Company matters. Our Nominating and Corporate Governance Committee does not have a formal policy with regard to the consideration of diversity in identifying director candidates, but seeks a diverse group of candidates who possess the background, skills and expertise to make a significant contribution to the Board, to the Company and our stockholders. Candidates whose evaluations are favorable are recommended by our Nominating and Corporate Governance Committee to the full Board for consideration. The full Board selects and recommends candidates for nomination as directors for stockholders to consider and vote upon at the annual meeting.

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A stockholder wishing to nominate a candidate for election to our Board of Directors at any annual meeting at which the Board of Directors has determined that one or more directors will be elected must submit a written notice of his or her nomination of a candidate to the Chairperson of the Nominating and Corporate Governance Committee (c/o the Corporate Secretary), providing the candidates name, biographical data and other relevant information together with a consent from the nominee. Pursuant to our Bylaws, the submission must be received at our principal executive offices 120 days prior to the anniversary date of the mailing date of our previous year s proxy statement so as to permit the Board of Directors time to evaluate the qualifications of the nominee.

We have not employed an executive search firm, or paid a fee to any other third party, to locate qualified candidates for director positions.

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who own more than ten percent of our common stock, to file reports of ownership and changes in ownership of our common stock with the SEC. Officers, directors, and greater-than-ten-percent stockholders are required by the SEC s regulations to furnish us with copies of all Section 16(a) forms that they file. Based solely upon a review of the Section 16(a) forms furnished to us during the most recent fiscal year, we believe that all such forms required to be filed were timely filed, as necessary, by the officers, directors, and security holders required to file the forms during the fiscal year ended December 31, 2013.

Code of Ethics

We have adopted a written code of ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller and any persons performing similar functions. The code of ethics is on the Investors & Media Corporate Governance section of our web site at www.fibrocellscience.com.We intend to disclose any future amendments to, or waivers from, the code of ethics within four business days of the waiver or amendment through a website posting or by filing a Current Report on Form 8-K with the SEC.

Item 11. Executive Compensation

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis (or CD&A) provides an overview and analysis of the compensation philosophy of our company, the roles and responsibilities of our Compensation Committee, our CEO, and our compensation plans and agreements. This analysis focuses on the compensation paid to our named executive officers, which is a defined term generally encompassing all persons that served as our principal executive officer or principal financial officer at any time during our last fiscal year, as well as certain other highly paid executive officers and key personnel serving in such positions at the end of the fiscal year. For 2013, our named executive officers consisted of the following officers:

- David Pernock, our Chairman of the Board and Chief Executive Officer.
- Gregory Weaver, our Chief Financial Officer, Senior Vice President, Treasurer and Corporate Secretary. Mr. Weaver joined us in September 2013.
- Declan Daly, our former Chief Financial Officer and Chief Operating Officer. Mr. Daly resigned in June 2013, but continued to provide us with transition services until November 2013.
- John Maslowski, our Vice President of Scientific Affairs.
- Laura Campbell, our Vice President of Human Resources and Business Process.
- Karen Donhauser, our Vice President of Quality.

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General Executive Compensation Philosophy

Our general executive compensation philosophy has been established by the Compensation Committee of our board of directors, which acts pursuant to authority delegated to it by the board of directors. Our Compensation Committee is comprised solely of independent directors as defined by the NYSE MKT and non-employee directors as defined by Rule 16b-3 under the Exchange Act.

We adhere to the following compensation policies, which are designed to support the achievement of our business strategies:

- Our executive compensation program should strengthen the relationship between compensation, both cash and equity-based, and performance by emphasizing variable, at-risk compensation that is dependent upon the successful achievement of specified corporate, business unit and individual performance goals.

- A portion of each executive s total compensation should be comprised of long-term, at-risk compensation to focus management on the long-term interests of shareholders.

- An appropriately balanced mix of at-risk incentive cash and equity-based compensation aligns the interests of our executives with that of our shareholders. The equity-based component promotes a continuing focus on building profitability and shareholder value.

- Total compensation should enhance our ability to attract, retain, motivate and develop knowledgeable and experienced executives upon whom, in large part, our successful operation and management depends.

We compensate our executive management through a combination of salaries, merit based cash performance awards and long-term equity compensation that is designed to be competitive with comparable companies within the biotechnology industry. Our executive compensation program is structured to align management s incentives with the long-term interests of our shareholders, and to maximize profitability and shareholder value.

Advisory Vote on Executive Compensation

We conducted our first advisory vote on executive compensation at our 2013 Annual Meeting of Stockholders. While these votes were not binding on us, our board of directors or our Compensation Committee, our board of directors and our Compensation Committee value the opinions of our stockholders and, to the extent there is any significant vote against the compensation of our named executive officers in the future, we will consider our stockholders concerns and our board of directors and Compensation Committee will evaluate whether any actions are necessary to address those concerns.

At our 2013 Annual Meeting of Stockholders, approximately 84% of the votes cast on the advisory vote on executive compensation proposal were in favor of our named executive officer compensation as disclosed in the proxy statement. Our board of directors and Compensation Committee reviewed these final vote results and determined that, given the significant level of support, no changes to our executive compensation policies and decisions were necessary based on the vote results.

We have determined that our stockholders should vote on a say-on-pay proposal every three years, consistent with the preference expressed by our stockholders at our 2013 Annual Meeting of Stockholders, at which approximately 77% of the votes cast were in favor of a three year vote.

Executive Compensation Process

Role of Our Compensation Committee and Our CEO

In order to determine compensation for our named executive officers, our Compensation Committee reviews competitive information on executive compensation practices from our peer companies as well as an assessment of

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overall corporate performance and individual performance. In addition, our CEO provides a performance review and compensation recommendation for each named executive officer, other than himself. Our CEO does not submit an assessment of his own performance, does not present a recommendation on his own compensation, and does not participate in the portion of the meeting where his compensation is determined. Our Compensation Committee recommends the CEO s compensation to the Board of Directors for approval. With respect to our other named executive officers, our Compensation Committee approves the compensation for such executive officers.

Role of the Compensation Committee s Independent Consultant

During 2013, our Compensation Committee retained Radford, an Aon Hewitt Consulting Company, to review its executive compensation program and to provide them with independent compensation data and analysis. Radford reports directly and exclusively to the Compensation Committee. During 2013, we paid approximately $40,000 in fees to Radford for its services to our Compensation Committee.

During 2013, in addition to the consulting services Radford provided our Compensation Committee, Aon Risk Services, an affiliate of Radford, was retained by us for various insurance-related consulting services, and Radford Surveys, an affiliate of Radford, was retained by us for various compensation surveys. During 2013, the aggregate cost of the foregoing services and surveys was $72,942.

Our Compensation Committee analyzed whether the work of Radford as a compensation consultant has raised any conflict of interest, taking into consideration the following factors: (1) the provision of other services to us by Radford; (2) the amount of fees received from us by Radford, as a percentage of the total revenue of Radford; (3) Radford s policies and procedures that are designed to prevent conflicts of interest; (4) any business or personal relationship of Radford or the individual advisors employed by Radford with a member of the Compensation Committee or any executive officer; and (5) any stock owned by Radford or the individual advisors employed by Radford. Our Compensation Committee determined, based on its analysis of the above factors, that the work of Radford and the individual compensation advisors employed by Radford as compensation consultants has not created any conflict of interest and the Compensation Committee is satisfied with the independence of Radford. Going forward, the Compensation Committee intends to assess the independence of any of our compensation advisers by reference to the foregoing factors, consistent with applicable NYSE MKT listing standards.

In July 2013, Radford provided our Compensation Committee with an assessment of our compensation program against competitive market data. To determine competitive market compensation, broad biotechnology survey data was, where appropriate, blended equally with public peer group data. Specific information about our peer group is discussed below. During 2013, our Compensation Committee utilized Radford s services to review the compensation of our officers. In addition, our Compensation Committee utilized Radford s services to review the compensatory terms included in the employment agreements we entered into with our CEO and CFO during 2013.

Use of Market Compensation Data

In making compensation decisions, our Compensation Committee reviewed market compensation data from Radford. To determine competitive market compensation, Radford blended equally data from the Radford Global Life Sciences Survey, which includes public biotechnology / pharmaceutical companies with less than 150 employees and less than $400 million in market value, with, where available and appropriate, the following public peer group:

AcelRx Pharmaceuticals	Cytokinetics	NeoStem
Agenus	Cytomedix	Neuralstem
Anika Therapeutics	Cytori Therapeutics	OncoGenex Pharmaceuticals
Athersys	Discovery Laboratories	Oragenics
AxoGen	GTx	Osiris Therapeutics
BioTime	IGI Laboratories	StemCells
Curis	KYTHERA Biopharmaceuticals	ZIOPHARM Oncology

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Our Compensation Committee has adopted a compensation philosophy of targeting our executive compensation to the 50th percentile of executive compensation of our peer group. Executive compensation may be above or below the 50th percentile based on an executive s experience, scope of position, individual performance and company constraints. Our Compensation Committee focuses on reviewing information for the 50th percentile because of its view, which is consistent with Radford s advice, that maintaining competitive levels of compensation to attract and, more importantly, retain our executive officers is best achieved when compensation opportunities are consistent with the 50th percentile. In practice, our Compensation Committee has in the past and may in the future set a particular component above or below the 50th percentile based on various factors discussed in this CD&A. Additionally, actual compensation realized under our merit based cash performance awards and long-term equity compensation plans could ultimately vary from the 50th percentile depending on performance.

Components of Our Executive Compensation Program

We do not have any formal or informal policy or target for allocating compensation between long-term and short-term compensation or between cash and non-cash compensation. Instead, our Compensation Committee, after reviewing information provided by Radford, determines subjectively what it believes to be the appropriate level and mix of the various compensation components.

The primary elements of our executive compensation program are:

- base salary;
- merit based cash performance awards; and
- equity-based awards.

Base Salaries

Base salary is used to recognize the experience, skills, knowledge and responsibilities required of all our employees, including our executives. When establishing base salaries, our Compensation Committee considers various data regarding the base salaries of executive officers in comparable positions at other biotechnology companies. Our Compensation Committee also considers the individual experience level and actual performance of each executive officer in light of our needs and objectives.

Base salaries for our named executive officers are reviewed at least annually by our Compensation Committee, and may be adjusted to realign salaries with market levels after taking into account individual responsibilities, performance and experience, subject to minimum salary requirements set forth in employment agreements with respect to our CEO and CFO. Base salaries may be increased for merit reasons based on the executive s success in meeting or exceeding individual performance objectives as well as our combined success in meeting corporate goals,

including research and clinical milestones. An executive s base salary is also evaluated by reviewing the executive s other compensation components to ensure that the executive s total compensation is in line with our overall compensation philosophy as discussed above.

The following were the annual base salary amounts paid to our named executive officers for fiscal year 2013:

Name	Title		Annual Base Salary
David Pernock	Chairman of the Board and Chief Executive Officer	$	454,769
Gregory Weaver	Chief Financial Officer, Senior Vice President, Treasurer and Corporate Secretary	$	96,923
Declan Daly	Former Chief Financial Officer and Chief Operating Officer	$	226,154
John Maslowski	Vice President of Scientific Affairs	$	188,000
Laura Campbell	Vice President of Human Resources and Business Process	$	199,423
Karen Donhauser	Vice President of Quality	$	148,846

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For Mr. Pernock, the above base salary for fiscal year 2013 reflects an annualized salary of $450,000 through November 15, 2013, which was identical to his base salary for fiscal years 2010, 2011 and 2012, and a base salary of $490,000 from November 15, 2013 through the end of the fiscal year. On November 15, 2013, we entered into a new employment agreement with Mr. Pernock that provided for an annualized base salary of $490,000.

Effective September 2013, we entered into an employment agreement with Mr. Weaver with an annual base salary of $300,000, and the above base salary represents salary received during 2013.

Merit Based Cash Performance Awards

Each year, our named executive officers have the opportunity to receive merit based cash performance awards. Participants are eligible to receive a target payment that is expressed as a percentage of the officer s base salary and that is based on the performance of Fibrocell and each named executive officer s overall individual performance (with the exception of the CEO, as his awards are based solely on company-wide performance and not individual performance).

Although Messrs. Pernock and Daly were eligible for annual cash performance awards during 2013 pursuant to their individual employment agreements, they and our Compensation Committee agreed to forego any cash performance awards for 2013 due to the financial condition of our company at the time 2013 performance award criteria would have been established. In addition, pursuant to Mr. Weaver s employment agreement entered into in September 2013, fiscal year 2014 will be the first year in which he will be eligible to receive a cash performance award.

Long-term Equity Based Awards

In keeping with our philosophy of providing a total compensation package that favors at-risk components of pay, long-term incentives comprise a significant component of our executives total compensation package. These incentives are designed to motivate and reward executives for maximizing shareholder value and encourage the long-term employment of key employees.

We view stock options as our primary long-term compensation vehicle for our executive officers. Stock options are granted at the prevailing market price on the date of grant and will have value only if our stock price increases. Grants of stock options generally are based upon our performance, the level of the executive s position, and an evaluation of the executive s past and expected future performance. Our Compensation Committee grants stock options periodically, but not necessarily on an annual basis.

The following table summarizes the stock options awarded to the named executive officers in 2013:

Name	Title	Stock Option Awards
David Pernock	Chairman of the Board and Chief Executive Officer	975,000
Gregory Weaver	Chief Financial Officer, Senior Vice President, Treasurer and Corporate Secretary	125,000
Declan Daly	Former Chief Financial Officer and Chief Operating Officer	
John Maslowski	Vice President of Scientific Affairs	17,500
Laura Campbell	Vice President of Human Resources and Business Process	35,000
Karen Donhauser	Vice President of Quality	17,500

The options issued to our named executive officers in July 2013 vest in four equal installments with the first installment on the date of grant and the remaining three installments on the following three anniversary dates after the date of grant provided the officer is still employed by us on such dates.

The remaining options issued to our named executive officers during 2013 consisted of options to our CEO and CFO and were issued in connection with such officers entering into new employment agreements. In connection

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with Mr. Pernock entering into a new employment agreement with us in November 2013, he was issued options to purchase 800,000 shares of our common stock vesting in equal quarterly installments over a four-year period commencing on February 15, 2014, provided Mr. Pernock is our CEO on each vesting date. In connection with Mr. Weaver entering into a new employment agreement with us effective September 2013, he was issued options to purchase 125,000 shares vesting 31,250 shares upon the first anniversary of Mr. Weaver s execution of his employment agreement, and 93,750 shares in equal 1/12th installments quarterly over a three-year period commencing on the first anniversary of his execution date of the employment agreement, in each case provided Mr. Weaver is our CFO on each vesting date.

Equity Grant Policies

Commencing in 2014, annual stock option grants may be made in the first quarter of each fiscal year. These awards are discussed by the Compensation Committee who determines all elements of the executive officers compensation for the year.

Stock options that are granted as part of our long-term incentive program are granted with an exercise price equivalent to the closing price of our common stock on the NYSE MKT on the date of grant. Stock options that are granted to any newly hired or promoted executive officers during the course of the year must be approved by the Compensation Committee prior to extending an offer or promotion. The exercise price of stock options granted to a newly hired executive officer is set at the closing price of our common stock on the NYSE MKT on the start date of the executive officer.

We do not currently maintain any formal policy regarding executive officer stock ownership or the hedging of economic risk related to such stock ownership nor do we have any program, plan or obligation that requires us to grant equity compensation to any executive on specified dates. The authority to make equity grants to executive officers rests with the Compensation Committee, although, as noted above, the Compensation Committee does consider the recommendations of the CEO in setting the stock option grants of our executive officers (other than the CEO).

Other Benefits and Perquisites

We provide medical insurance, dental insurance and life insurance benefits to our employees, including our named executive officers. These benefits are available to all employees on the same terms and conditions. Our executive officers do not receive any perquisites, provided that with respect to our hiring of Mr. Weaver, we provided Mr. Weaver with a $40,000 relocation allowance. We do not sponsor any defined benefit pension plan or nonqualified deferred compensation plan or arrangement for our employees.

Agreements Providing for Change of Control and Severance Benefits

We have employment agreements with our CEO and CFO that provide for severance payments and, with respect to our CEO, accelerated vesting benefits triggered by a change in control. For a description of these agreements and our potential payment obligations, please see Employment Agreements and Potential Payments Upon Termination or Change in Control and the related tabular disclosure below.

When entering into employment agreements which provide for post-termination compensation, our Compensation Committee considers, among multiple factors, peer company practice and retention needs. Gains from prior equity awards are not a material consideration in setting the level of such compensation. In particular, we believe such employment agreements benefit us and our stockholders by attracting and retaining executives in a marketplace where such protections are commonly offered by our peer companies.

We use a double trigger with respect to benefits that are to be provided in connection with a change of control. A change of control does not itself trigger benefits; rather, benefits are paid only if the employment of the executive is terminated by us other than for cause or due to the executive s death or disability during a specified period after a change of control. We believe a double trigger benefit maximizes shareholder value because it prevents a windfall to executives in the event of a change of control in which the executive retains significant responsibility as defined in his or her individual agreement, while still providing our executives appropriate incentives to cooperate in

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negotiating any change of control that may put their jobs at risk. Further, we believe the severance protection offered under the employment agreements is balanced with the interests of our company and its stockholders, as the executives are bound by non-disclosure, non-competition, and non-solicitation arrangements and must execute a general release in favor of Fibrocell as a condition to receiving benefits under these agreements.

Tax Deductibility of Executive Compensation

Section 162(m) of the Internal Revenue Code (the Code) denies a federal income tax deduction for specified compensation in excess of $1.0 million per year paid to the chief executive officer and the three other most highly paid executive officers, other than a company s chief financial officer, of a publicly traded corporation. To maintain flexibility in compensating our executive officers in a manner that promotes varying corporate goals, our Compensation Committee has not adopted a policy requiring all compensation to be deductible. Our Compensation Committee will continue to evaluate the effects of the executive compensation deduction limitations of Section 162(m) of the Code and to grant compensation in the future in a manner consistent with our best interests and the best interests of our stockholders.

Compensation Recovery Policy

We do not have a policy to attempt to recover cash bonus payments paid to our executive officers if the performance objectives that led to the determination of such payments were to be restated, or found not to have been met to the extent the Compensation Committee originally believed. However, as a public company subject to the provisions of Section 304 of the Sarbanes-Oxley Act of 2002, if we are required as a result of misconduct to restate our financial results due to our material noncompliance with any financial reporting requirements under the federal securities laws, our chief executive officer and chief financial officer may be legally required to reimburse us for any bonus or other incentive-based or equity-based compensation they received from us during the 12-month period following the first public issuance or filing (whichever first occurs) of the financial document embodying such financial reporting requirement, and any profits realized from the sale of our securities during that 12-month period.

Risk Analysis of Our Compensation Program

Our Compensation Committee has reviewed our compensation policies as generally applicable to our employees and believes that our policies do not encourage excessive or inappropriate risk taking and that the level of risk that they do encourage is not reasonably likely to have a material adverse effect on us. As part of its assessment, the Compensation Committee considered, among other factors, the allocation of compensation among base salary and short- and long-term compensation and our approach to establishing company-wide and individual financial, operational and other performance targets in connection with establishing our merit based performance awards.

COMPENSATION COMMITTEE REPORT

The Compensation Committee has reviewed and discussed with management the Compensation Discussion and Analysis section of the Company s Annual Report on Amended Form 10-K/A for the year ended December 31, 2013. Based on its review and discussions with

management, the Compensation Committee recommended to the board of directors that the Compensation Discussion and Analysis be included in the Company s Annual Report on Amended Form 10-K/A for the year ended December 31, 2013.

Kelvin Moore (Chairperson)

Marc Mazur

Douglas J. Swirsky

COMPENSATION OF DIRECTORS AND EXECUTIVE OFFICERS

Executive Officer Compensation

The following table sets forth information regarding compensation with respect to the fiscal years ended December 31, 2013, 2012 and 2011, paid or accrued by us to or on behalf of those persons who, during the fiscal

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year ended December 31, 2013 served as our Chief Executive Officer or Chief Financial Officer, as well as our most highly compensated officers during the year ended December 31, 2013 (the named executive officers).

Summary Compensation Table 2013

Name and Principal Position	Year	Salary ($)	Bonus ($)	Option Awards ($)(1)	All Other Compensation ($)	Total ($)
David Pernock, Chief Executive Officer	2013	454,769		2,344,412		2,799,181
	2012	450,000				450,000
	2011	450,000		1,464,495		1,914,495
Gregory Weaver, Chief Financial Officer (2)	2013	96,923		393,788	40,000(3)	530,711
John Maslowski, Vice President of Scientific Affairs	2013	188,000		61,566		249,566
	2012	188,000				188,000
	2011	164,923	20,000	137,273		322,196
Laura Campbell, Vice President of Human Resources and Business Process	2013	199,423		123,132		322,555
Karen Donhauser, Vice President of Quality	2013	148,846		61,566		210,412
Declan Daly, Former Chief Financial Officer	2013	226,154			229,141(4)	455,295
	2012	300,000				300,000
	2011	300,000	50,000(5)	737,435	41,297(6)	1,128,732

(1) Represents the full grant date fair value of the stock award or option grant, as applicable, calculated in accordance with FASB ASC Topic 718. For the purposes of making the option calculation in 2011, the following assumptions were made: (a) expected life (years) 5.5 (for the options issued to Messrs. Pernock, Daly and Maslowski); (b) volatility 61.70% (for the options issued to Mr. Maslowski and issued to Messrs. Pernock and Daly in January 2011); volatility 61.57% (for the options issued to Messrs. Pernock and Daly in April 2011); (c) dividend yield none; and (d) discount rate 2.13% (for the options issued to Mr. Maslowski and issued to Messrs. Pernock and Daly in January 2011); discount rate 2.48% (for the options issued to Messrs. Pernock and Daly in April 2011). For the purposes of making the option calculation in 2013, the following assumptions were made: (a) expected life (years) 5.88 (for the options issued to Mr. Maslowski, Ms. Campbell and Ms. Donhauser issued in July 2013); expected life (years) 5.75 (for the options issued to Mr. Pernock in July 2013); expected life (years) 6.25 (for the options issued to Mr. Weaver in August 2013); expected life (years) 6.06 (for the options issued to Mr. Pernock in November 2013); (b) volatility 73.00% (for the options issued to Mr. Pernock, Mr. Maslowski, Ms. Campbell and Ms. Donhauser issued in July 2013); volatility 71.00% (for the options issued to Mr. Weaver in August 2013 and to Mr. Pernock in November 2013); (c) dividend yield none; and (d) discount rate 1.57% (for the options issued to Mr. Maslowski, Ms. Campbell and Ms. Donhauser issued in July 2013); discount rate 1.53% (for the options issued to Mr. Pernock in July 2013); discount rate 2.00% (for the options issued to Mr. Weaver in August 2013); discount rate 1.73% (for the options issued to Mr. Pernock in November 2013).

(2) Mr. Weaver joined the Company in September 2013.

(3) Represents a relocation allowance.

(4) Includes approximately $173,077 paid to Mr. Daly in connection with Mr. Daly s separation agreement (which includes severance payments and payment for unused vacation), as well approximately $50,000 in post-separation consulting fees.

(5) Pursuant to Mr. Daly s employment agreement, Mr. Daly was entitled to receive a one-time bonus in the amount of $50,000 upon the U.S. Food and Drug Administration s approval of our Biologics License

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Application (BLA) filing.

(6) Represented a tax gross up payment.

Grants of Plan-Based Awards

The following table presents information on equity awards granted under our 2009 Equity Incentive Plan during the year ended December 31, 2013 to our named executive officers.

Grants of Plan-Based Awards 2013

Name	Grant Date	All Other Option Awards: Number of Securities Underlying Options (#)	Exercise or Base Price of Option Awards ($/ Sh)	Grant Date Fair Value of Stock and Option Awards ($)
David Pernock	7/19/2013	175,000(1)	5.49	610,202
	11/15/2013	800,000(2)	3.40	1,734,210
Gregory Weaver	8/26/2013	125,000(3)	4.86	393,788
John Maslowski	7/19/2013	17,500(4)	5.49	61,566
Laura Campbell	7/19/2013	35,000(5)	5.49	123,132
Karen Donhauser	7/19/2013	17,500(4)	5.49	61,566
Declan Daly				

(1) Of the shares underlying the option, 43,750 shares vested on July 19, 2013 and 43,750 shares vest on each of the following three anniversary dates of the grant date.

(2) The shares underlying the option vest in equal quarterly installments over a four-year period commencing on February 15, 2014, provided Mr. Pernock is our Chief Executive Officer on each vesting date.

(3) The shares underlying the option vests as follows: (i) 31,250 shares on August 26, 2014; and (ii) 93,750 shares in equal 1/12th installments quarterly over a three-year period commencing on August 26, 2014, in each case provided Mr. Weaver is our Chief Financial Officer on each vesting date.

(4) Of the shares underlying the option, 4,375 shares vested on July 19, 2013 and 4,375 shares vest on each of the following three anniversary dates of the grant date.

(5) Of the shares underlying the option, 8,750 shares vested on July 19, 2013 and 8,750 shares vest on each of the following three anniversary dates of the grant date.

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Equity Awards

The following table sets forth certain information concerning our outstanding options for our named executive officers at December 31, 2013.

Outstanding Equity Awards At Fiscal Year-End 2013

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Exercise Price ($)	Option Expiration Date
David Pernock		800,000(1)	3.40	11/15/2023
	43,750	131,250(2)	5.49	7/19/2023
	60,000		20.50	4/8/2021
	84,000		15.50	1/14/2021
	66,000		27.00	2/1/2020
	18,000		18.75	9/30/2019
Gregory Weaver		125,000(3)	4.86	8/26/2023
John Maslowski	4,375	13,125(4)	5.49	7/19/2023
	13,600		15.50	1/14/2021
	4,000		18.75	10/6/2019
Laura Campbell	8,750	26,250(5)	5.49	7/19/2023
	12,000	4,000(6)	18.75	4/1/2021
	6,000		15.50	1/14/2021
Karen Donhauser	4,375	13,125(4)	5.49	7/19/2023
	4,000		15.50	1/14/2021
	2,400		18.75	10/6/2019
Declan Daly	30,000		20.50	4/8/2021
	42,600		15.50	1/14/2021
	16,000		13.75	8/24/2020
	2,000		18.75	11/20/2019

* The information in the table reflects the occurrence of a 1-for-25 reverse split of our common stock that occurred on April 30, 2013.

(1) The unvested shares underlying the option vest in equal quarterly installments over a four-year period commencing on February 15, 2014, provided Mr. Pernock is our Chief Executive Officer on each vesting date.

(2) The unvested shares underlying the option vest in three 43,750 share installments on each of the three anniversary dates of the grant date commencing.

(3) The shares underlying the option vests as follows: (i) 31,250 shares on August 26, 2014; and (ii) 93,750 shares in equal 1/12th installments quarterly over a three-year period commencing on August 26, 2014, in each case provided Mr. Weaver is our Chief Financial Officer on each vesting date.

(4) The unvested shares underlying the option vest in three 4,375 share installments on each of the three anniversary dates of the grant date commencing.

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(5) The unvested shares underlying the option vest in three 8,750 share installments on each of the three anniversary dates of the grant date commencing.

(6) The unvested shares underlying the option vest in one 4,000 share installment on the last anniversary date of the grant date commencing.

None of our named executive officers has exercised any options.

Employment Agreements

On November 15, 2013, we entered into an employment agreement with Mr. David Pernock, which replaced our prior agreement with Mr. Pernock, pursuant to which Mr. Pernock continued to serve as our Chief Executive Officer for an initial term ending December 31, 2016, which may be renewed for an additional one-year term by mutual agreement. The agreement provides for an annual salary of $490,000. Commencing in 2014, Mr. Pernock is entitled to receive an annual bonus payable subsequent to the issuance of our final audited financial statements, but in no case later than 120 days after the end of our most recently completed fiscal year. The final determination on the amount of the annual bonus will be made by our Compensation Committee, based on criteria established by the Compensation Committee. The targeted amount of the annual bonus shall be 60% of Mr. Pernock s base salary, although the actual bonus may be higher or lower.

Under the agreement, Mr. Pernock was granted a ten-year option to purchase 800,000 shares of our common stock at an exercise price per share equal to the closing price of our common stock on the date of execution of his employment agreement, or November 15, 2013. The options vest in equal quarterly installments over a four-year period commencing on February 15, 2014, provided Mr. Pernock is our Chief Executive Officer on each vesting date. The vesting of all options set forth above shall accelerate upon a change in control as defined in the agreement, provided Mr. Pernock is employed by us within 60 days prior to the date of such change in control.

If Mr. Pernock s employment is terminated at our election at any time, for reasons other than death, disability, cause, a voluntary resignation or in the context of either party giving notice of non-renewal of the agreement, or by Mr. Pernock for good reason, Mr. Pernock shall be entitled to receive severance payments equal to twelve months of Mr. Pernock s base salary and of the premiums associated with continuation of Mr. Pernock s benefits pursuant to COBRA to the extent that he is eligible for them following the termination of his employment; provided that if anytime within eighteen months after a change in control either (i) Mr. Pernock is terminated, at our election at any time, for reasons other than death, disability, cause, voluntary resignation or in the context of either party giving notice of non-renewal of the agreement, or (ii) Mr. Pernock terminates his employment for good reason, Mr. Pernock shall be entitled to receive severance payments equal to: (1) two years of Mr. Pernock s base salary, (2) Mr. Pernock s most recent annual bonus payment, and (3) the premiums associated with continuation of Mr. Pernock s benefits pursuant to COBRA to the extent that he is eligible for them following the termination of his employment for a period of one year after termination. All severance payments shall be made in a lump sum 45 days following such termination, provided Mr. Pernock has executed and delivered to us (and not revoked) a general release. For purposes of the agreement, cause for termination shall mean that Mr. Pernock: (A) pleads guilty or no contest to or is convicted of an act which is defined as a felony under federal or state law or the indictment of, or the bringing of formal charges against him on charges involving criminal fraud or embezzlement; (B) in carrying out his duties, engages in conduct that constitutes gross negligence or willful misconduct; (C) engages in any conduct that may cause harm to our reputation; or (D) materially breaches any term of his employment agreement. For purposes of the agreement, good reason, means: (i) if the board of directors or that of any successor entity, fails to appoint or reappoint Mr. Pernock or removes Mr. Pernock as Chief Executive Officer; or (ii) if Mr. Pernock is assigned any duties materially inconsistent with the duties or responsibilities of the Chief Executive Officer or any other action by us that results in a material

diminution in such position, authority, duties, or responsibilities. During the term of the agreement, and, if severance payments are being made, until 12 months thereafter, Mr. Pernock has agreed not to compete with us after termination of his employment.

On August 26, 2013, we entered into an employment agreement with Mr. Gregory Weaver pursuant to which Mr. Weaver agreed to serve as our Chief Financial Officer, Senior Vice President, Treasurer and Corporate Secretary commencing September 3, 2013 for an initial term ending August 26, 2015, which may be renewed for an additional

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one-year term by mutual agreement. The agreement provides for an annual salary of $300,000. Commencing in 2014, Mr. Weaver is entitled to receive an annual bonus payable subsequent to the issuance of our final audited financial statements, but in no case later than 120 days after the end of our most recently completed fiscal year. The final determination on the amount of the annual bonus will be made by the Compensation Committee of the Board of Directors, based on criteria established by the Compensation Committee. The targeted amount of the annual bonus shall be 35% of Mr. Weaver s base salary, although the actual bonus may be higher or lower. In addition, we agreed to pay Mr. Weaver a relocation allowance of $40,000.

Under the agreement, Mr. Weaver was granted a ten-year option to purchase 125,000 shares of our common stock at an exercise price per share equal to the closing price of our common stock on the date of execution of his employment agreement. The options vest as follows: (i) 31,250 shares upon the first anniversary of Mr. Weaver s execution of the agreement, provided Mr. Weaver is our Chief Financial Officer on such date; and (ii) 93,750 shares in equal 1/12th installments quarterly over a three-year period commencing on the first anniversary of the execution date of the agreement, provided Mr. Weaver is our Chief Financial Officer on each vesting date.

If Mr. Weaver s employment is terminated at our election at any time, for reasons other than death, disability, cause or a voluntary resignation, Mr. Weaver shall be entitled to receive severance payments equal to nine months of Mr. Weaver s base salary. For purposes of Mr. Weaver s agreement, cause for termination mean that Mr. Weaver: (A) pleads guilty or no contest to, or is convicted of an act which is defined as a felony under federal or state law, or is indicted or formally charged with acts involving criminal fraud or embezzlement; (B) in carrying out his duties, engages in conduct that constitutes negligence or willful misconduct; (C) engages in any conduct that may cause harm to our reputation; or (D) materially breaches any term of the employment agreement. If severance payments are being made, Mr. Weaver has agreed not to compete with us until nine months after the termination of his employment.

Potential Payments on Termination or Change in Control

As discussed above in Employment Agreements, we have provided Messrs. Pernock and Weaver certain benefits if we terminate their employment with us or upon a change of control of the Company. We do not have any termination or change in control agreements or arrangements with our other named executive officers, provided that we entered into a separation agreement with Mr. Daly in 2013, which is described below.

The following table sets forth estimated compensation that would have been payable to or received by Messrs. Pernock and Weaver as severance or upon a change in control of our company under various scenarios described in each of their employment agreements, assuming the termination triggering severance payments or a change in control took place on December 31, 2013:

Name and triggering event (1)	Severance payments ($)	Accelerated vesting of stock options ($) (2)	Other benefits ($) (3)	Total ($)
David Pernock				
Termination without cause or for good reason (not in connection with a change in control)	490,000		11,900	501,900
Termination without cause or for good reason (within 18 months after a change in control)	980,000(4)	528,000	11,900	1,519,900

Gregory Weaver		
Termination without cause (regardless of whether a change in control is present)	225,000	225,000

(1) Please see Employment Agreements above for a description of the definition of cause and good reason for Messrs. Pernock and Weaver.

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(2) Amounts shown represent the value of stock options based on the difference between the exercise price of the options and $4.06, which was the closing price of our common stock on the NYSE MKT on December 31, 2013.

(3) Amounts shown reflect payments based on estimated cost of premiums associated with continuation of benefits pursuant to COBRA to the extent that such officer is eligible for them following the termination of his employment for a period of twelve months.

(4) Mr. Pernock would also be entitled to the payment of his most recent annual bonus. Mr. Pernock did not receive an annual bonus during the previous year.

Declan Daly Separation Agreement

On June 28, 2013, we and Declan Daly, our former Chief Financial Officer, entered into an employment transition letter pursuant to which Mr. Daly agreed to remain as our Chief Financial Officer until we named a successor or until September 30, 2013, whichever occurred sooner. In addition, Mr. Daly agreed to provide us with transition services until November 30, 2013 as an independent consultant. During the transition period, Mr. Daly continued to receive his then base salary until September 30, 2013 and was paid a consulting fee from October 1, 2013 until November 30, 2013. Pursuant to the employment transition letter, Mr. Daly was permitted to exercise any options to purchase our common stock that had vested as of September 30, 2013 until the option expiration date. Immediately following the cessation of Mr. Daly s services as an employee, we and Mr. Daly entered into a Separation and General Release Agreement (the Separation Agreement) pursuant to which, among other items, Mr. Daly generally released us from any claims he may have had against us or our affiliates. Upon execution of the Separation Agreement, we paid Mr. Daly $173,077 and we agreed to pay Mr. Daly s medical insurance and life insurance premiums for a period of eighteen months, as well approximately $50,000 in post-separation consulting fees.

Pension Benefits

None of our named executives participate in or have account balances in qualified or non-qualified defined benefit plans sponsored by us.

Nonqualified Deferred Compensation

None of our named executives participate in or have account balances in non-qualified defined contribution plans or other deferred compensation plans maintained by us.

Director Compensation

In July 2013, our board of directors approved a revised compensation program for its non-employee board members pursuant to which, effective August 1, 2013:

- each non-employee member of the board of directors will receive annualized compensation of $45,000;
- the lead independent director will receive annualized compensation of $15,000;
- the chair of the audit committee of the board of directors will receive annualized compensation of $14,000 and all other members of the committee will receive annualized compensation of $7,000;
- the chair of the compensation committee of the board of directors will receive annualized compensation of $10,000 and all other members of the committee will receive annualized compensation of $5,000; and
- the chair of the nominating and corporate governance committee of the board of directors will receive annualized compensation of $7,000 and all other members of the committee will receive annualized compensation of $3,000.

The following table sets forth the total compensation earned by our non-employee directors in 2013:

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Director Compensation Table 2013

Name	Fees Earned or Paid in Cash ($)	Option Awards ($)(1)(2)	Total ($)
Kelvin Moore	56,667	95,077	151,744
Marc Mazur	54,667	95,077	149,744
Marcus Smith	48,333	78,917	127,250
Julian Kirk	48,333	78,917	127,250
Christine St.Clare	42,691	95,077	137,768
Douglas Swirsky	40,430	96,197	136,627

(1) Represents the full grant date fair value of the option grant calculated in accordance with FASB ASC Topic 718. For the purposes of making the option calculation, the following assumptions were made: (a) expected life (years) 5.25; (b) volatility 68.50% (for the options issued to Mr. Moore, Mr. Mazur, and Ms. St.Clare in February 2013 and to Mr. Swirsky in March 2013); volatility 71.00% (for the options issued to Mr. Moore, Mr. Mazur, Ms. St.Clare, Mr. Swirsky, Mr. Smith and Mr. Kirk in July 2013); (c) dividend yield none; and (d) discount rate 0.86% (for the options issued to Mr. Moore, Mr. Mazur, and Ms. St.Clare in February 2013); discount rate 0.76% (for the options issued to Mr. Swirsky in March 2013); discount rate 1.38% (for the options issued to Mr. Moore, Mr. Mazur, Ms. St.Clare, Mr. Swirsky, Mr. Smith and Mr. Kirk in July 2013).

(2) As of December 31, 2013, we had granted the following option awards to our non-executive directors who served as directors during 2013 (reflecting the occurrence of a 1-for-25 reverse split of our common stock that occurred on April 30, 2013):

Name	Option Awards		Exercise Price
Kelvin Moore	24,000	$	5.49
	8,000	$	3.50
	8,000	$	15.50
	8,000	$	18.75
Total	**48,000**		
Marc Mazur	24,000	$	5.49
	8,000	$	3.50
	8,000	$	15.50
	8,000	$	26.00
Total	**48,000**		
Marcus Smith	24,000	$	5.49
	8,000	$	5.00
Total	**32,000**		
Julian Kirk	24,000	$	5.49
	8,000	$	5.00
Total	**32,000**		
Christine St.Clare	24,000	$	5.49

	8,000	$	3.50
Total	**32,000**		
Douglas Swirsky	24,000	$	5.49
	8,000	$	3.75
Total	**32,000**		

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Compensation Committee Interlocks and Insider Participation

No member of our Compensation Committee has ever been an executive officer or employee of ours. None of our executive officers currently serves, or has served during the last completed fiscal year, on the Compensation Committee or Board of Directors of any other entity that has one or more executive officers serving as a member of our board of directors or Compensation Committee.

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

The following table shows, as of the record date of April 22, 2014, the securities owned by each director, nominee, and named executive officer, as well as all persons we know to be beneficial owners of five percent or more of our common stock (reflecting the occurrence of a 1-for-25 reverse split of our common stock that occurred on April 30, 2013):

Name of Beneficial Owner	Common stock Beneficially Owned(1)	Percent of Class(2)
David Pernock	381,750(3)	*
Kelvin Moore	36,000(4)	*
Marc Mazur	44,000(5)	*
Marcus Smith	20,000(4)	*
Julian Kirk	20,000(4)	*
Christine St.Clare	20,000(4)	*
Douglas J. Swirsky	20,000(4)	*
Gregory Weaver	10,000(6)	*
John Maslowski	23,415(7)	*
Laura Campbell	40,350(8)	*
Karen Donhauser	10,775(4)	*
Declan Daly	114,600(9)	*
All Executive Officers and Directors as a Group (11 persons)	626,290	1.5%
Five percent or more of stockholders		
Randal J. Kirk (10)	15,244,427	37.3%
FMR LLC (11)	3,606,440	8.8%
Jennison Associates LLC (12)	2,942,985	7.2%
Prudential Financial, Inc. (13)	2,944,285	7.2%

* Represents less than 1% of the outstanding shares of the Company s common stock.

(1) Beneficial ownership is determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended. Unless otherwise noted, all listed shares of common stock are owned of record by each person or entity named as beneficial owner and that person or entity has sole voting and dispositive power with respect to the shares of common stock owned by each of them. Shares of common stock subject to options currently exercisable or exercisable within 60 days of the Record Date are considered outstanding for the purpose of computing the percentage ownership of the person holding such options, but are not considered outstanding when computing the percentage ownership of each

other person.

(2) Based upon 40,856,815 shares of common stock outstanding as of April 22, 2014.

(3) Includes options to purchase 371,750 shares of common stock.

(4) The share amounts set forth in the table consist solely of shares underlying one or more outstanding options to purchase our common stock.

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(5) Includes options and warrants to purchase an aggregate of 40,000 shares of our common stock.

(6) Consists solely of 10,000 shares of our common stock.

(7) Includes options and warrants to purchase an aggregate of 22,935 shares of our common stock.

(8) Includes options and warrants to purchase an aggregate of 35,550 shares of our common stock.

(9) Includes options to purchase an aggregate of 90,600 shares of our common stock. Mr. Daly resigned in June 2013, but continued to provide us with transition services until November 2013.

(10) Consists of 9,219,512 shares held by NRM VII Holdings I, LLC (NRM VII Holdings) and 6,024,915 shares held by Intrexon Corporation (NYSE: XON). NRM VII Holdings is managed by an affiliate that is managed by Third Security, LLC, a Virginia limited liability company that is managed by Mr. Kirk. Mr. Kirk could be deemed to have indirect beneficial ownership of the shares of Common Stock directly beneficially owned by NRM VII Holdings and Intrexon.

(11) Based on the Schedule 13G filed by FMR LLC on February 14, 2014, Fidelity SelectCo, LLC (SelectCo), 1225 17th Street, Suite, 1100, Denver, Colorado 80202, a wholly-owned subsidiary of FMR LLC and an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, is the beneficial owner of 3,606,440 shares of our common stock as a result of acting as investment adviser to various investment companies registered under Section 8 of the Investment Company Act of 1940 (the SelectCo Funds). Edward C. Johnson 3d and FMR LLC, through its control of SelectCo, and the SelectCo Funds each has sole power to dispose of the 3,606,440 owned by the SelectCo Funds. The ownership of one investment company, Fidelity Select Biotechnology Portfolio, amounted to 3,326,640 shares. Fidelity Select Biotechnology Portfolio has its principal business office at 245 Summer Street, Boston, Massachusetts 02210. Members of the family of Edward C. Johnson 3d, Chairman of FMR LLC, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B shareholders have entered into a shareholders voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the shareholders voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. The address for FMR LLC is 245 Summer Street, Boston, Massachusetts 02210.

(12) Based on the Schedule 13G filed by Jennison Associates LLC (Jennison) on February 14, 2014, Jennison furnishes investment advice to several investment companies, insurance separate accounts, and institutional clients (Managed Portfolios). As a result of its role as investment adviser of the Managed Portfolios, Jennison may be deemed to be the beneficial owner of the shares of Fibrocell common stock held by such Managed Portfolios. Prudential Financial, Inc. (Prudential) indirectly owns 100% of equity interests of Jennison. As a result, Prudential may be deemed to have the power to exercise or to direct the exercise of such voting and/or dispositive power that Jennison may have with respect to the Fibrocell common stock held by the Managed Portfolios. Jennison has sole voting power with respect to the shares listed in the table and shared power to dispose of the shares listed in the table. The address for Jennison Associates LLC is 466 Lexington Avenue, New York, New York 10017.

(13) Based on the Schedule 13G filed by Prudential on February 14, 2014, Prudential has shared voting and dispositive power with respect to 2,942,985 shares of the common stock held by Jennison and sole voting and dispositive power with respect to 1,300 shares of the common stock held by Quantitative Management Associates LLC. Prudential is a Parent Holding Company and the indirect parent of Jennison and Quantitative Management Associates LLC., who are the beneficial owners of the foregoing securities. The address for Prudential Financial, Inc. is 751 Broad Street, Newark, New Jersey 07102-3777.

Equity Compensation Plan Information

The following table sets forth information regarding our equity compensation plans as of December 31, 2013 (reflecting the occurrence of a 1-for-25 reverse split of our common stock that occurred on April 30, 2013):

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Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	1,878,720	$ 8.14	721,280
Equity compensation plans not approved by security holders	190,000(1)	$ 5.86	
Total	2,068,720	$ 7.93	721,280

(1) Consists of 24,000 shares and 166,000 underlying options issued to consultants outside of the 2009 Equity Incentive Plan, which have an exercise price of $18.75 per share and $4.00 per share, respectively.

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

In June 2013, we entered into an amendment to our Exclusive Channel Collaboration Agreement with Intrexon Corporation (Intrexon) that governs a channel collaboration arrangement. On such date, we also entered into a stock issuance agreement with Intrexon pursuant to which we agreed to issue to Intrexon 1,243,781 of our common stock as partial consideration for the execution and delivery of the amendment to the Exclusive Channel Collaboration Agreement.

On January 10, 2014, we and Intrexon entered into a second amendment to our Exclusive Channel Collaboration Agreement. In connection with the execution of the second amendment, on January 10, 2014, we entered into a separate supplemental stock issuance agreement with Intrexon pursuant to which we issued to Intrexon 1,024,590 shares of our common stock as partial consideration for the execution and delivery of the second amendment to the Exclusive Channel Collaboration Agreement.

Messrs. Smith and Kirk are employees of Third Security, LLC, which manages and is under common control with our largest shareholder, NRM VII Holdings I, LLC. Each of Third Security, LLC and NRM VII Holdings I, LLC are controlled by Randal J. Kirk. Intrexon is an affiliate of Randal J. Kirk.

Approval Policy for Related Party Transactions

Pursuant to our Audit Committee charter adopted in April 2013, our Audit Committee is responsible to review, approve and oversee any transaction between us and any related person (as defined in Item 404 of Regulation S-K). In approving or rejecting the proposed agreement, our Audit Committee considers the relevant facts and circumstances available and deemed relevant to the Audit Committee. Our Audit Committee shall approve only those agreements that, in light of known circumstances, are in, or are not inconsistent with, our best interests, as our Audit Committee determines in the good faith exercise of its discretion. Prior to the creation of our Audit Committee in March 2013, our full Board of Directors was responsible for reviewing, approving and overseeing transactions between us and any related party.

Director Independence

Our Board is subject to the independence requirements set forth by the NYSE MKT and has reviewed the independence of its directors under such requirements. During this review, the Board considered transactions and relationships between each director or any member of his or her immediate family and Fibrocell and its subsidiaries and affiliates. The purpose of this review was to determine whether relationships or transactions existed that were inconsistent with a determination that the director is independent. As a result of this review, our Board determined Ms. St.Clare and Messrs. Moore, Mazur and Swirsky are independent directors under the NYSE MKT listing standards.

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Item 14. Principal Accountant Fees and Services

BDO USA, LLP (BDO) served as our independent registered public accounting firm to audit our consolidated financial statements for the fiscal year ending December 31, 2013. Aggregate fees for professional services rendered by BDO for the respective services for the fiscal years ended December 31, 2013, 2012 and 2011 were as follows:

	2013	2012	2011
Audit fee	$ 349,870	$ 164,340	$ 147,153
Audit-related fees			
Tax fees	$ 27,080	$ 19,230	$ 21,608
All other fees			
TOTAL	$ 376,950	$ 183,570	$ 168,761

Audit Fees

Audit fees represent the aggregate fees billed for professional services rendered by BDO for the audit of our annual financial statements, review of financial statements included in our quarterly reports, review of registration statements or services that are normally provided in connection with statutory and regulatory filings or engagements for those fiscal years. Beginning in 2013, these audit fees also included BDO s audit of our internal controls over financial reporting.

Audit-Related Fees

Audit-related fees represent the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported under Audit Fees. There were no such fees in either fiscal 2011, 2012 or fiscal 2013.

Tax Fees

Tax fees represent the aggregate fees billed for professional services rendered by our principal accountants for tax compliance, tax advice, and tax planning for such years.

All Other Fees

All other fees represent the aggregate fees billed for products and services other than the services reported in the other categories. There were no such fees in either fiscal 2011, 2012 or fiscal 2013.

Audit Committee Pre-Approval Policies and Procedures

The Audit Committee on an annual basis reviews audit and non-audit services performed by the independent auditors. All audit and non-audit services are pre-approved by the Audit Committee, which considers, among other things, the possible effect of the performance of such services on the auditors independence.

Part IV

Item 15. Exhibits and Financial Statement Schedule

(a)(1) Financial Statements.

- Report of Independent Registered Public Accounting Firm

- Consolidated Balance Sheets (as Restated) as of December 31, 2013, 2012 and 2011

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- Consolidated Statements of Operations (as Restated) for the years ended December 31, 2013, 2012 and 2011

- Consolidated Statements of Stockholders Equity (Deficit) (as Restated) for the years ended December 31, 2013, 2012 and 2011

- Consolidated Statements of Cash Flows (as Restated) for the years ended December 31, 2013, 2012 and 2011

- Notes to Consolidated Financial Statements (as Restated)

(a)(2) Financial Statement Schedule.

All schedules are omitted because of the absence of conditions under which they are required or because the required information is presented in the Financial Statements or Notes thereto.

(a)(3) The exhibits listed under Item 15(b) are filed or incorporated by reference herein.

(b) Exhibits.

The following exhibits are filed as part of this annual report:

EXHIBIT NO.	IDENTIFICATION OF EXHIBIT
2.1	Debtors First Amended Joint Plan of Reorganization dated July 30, 2009 and Disclosure Statement (incorporated by reference to as Exhibit 10.2 to the Company s Form 10-Q for quarter ended June 30, 2009, filed on August 12, 2009 and as Exhibit 99.1 to our Form 8-K filed September 2, 2009)
3.1	Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to our Form 8-K filed December 13, 2012)
3.2	Certificate of Amendment of the Restated Certificate of Incorporation filed April 26, 2013 (incorporated by reference to Exhibit 3.1 of the Form 8-K filed on April 29, 2013)
3.3	Certificate of Amendment to the Company s Restated Certificate of Incorporation, as amended, filed July 19, 2013 (incorporated by reference to Exhibit 3.1 of the Form 8-K filed on July 22, 2013)
3.4	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.2 to our Form 8-K filed September 2, 2009)
4.1	Form of Common Stock Certificate (incorporated by reference to Exhibit 4.1 to our Form 10-Q filed November 23, 2009)
4.2	Form of Class A/B Common Stock Purchase Warrant issued in October 2009 offering (incorporated by reference to Exhibit 4.1 to our Form 8-K filed October 14, 2009)
4.3	

	Form of Placement Agent Warrant issued in November 2009 offering (incorporated by reference to Exhibit 4.2 to our Form 10-Q filed November 23, 2009)
4.4	Form of Common Stock Purchase Warrant issued in March 2010 offering (incorporated by reference to Exhibit 4.1 to our Form 8-K filed March 3, 2010)
4.5	Form of Common Stock Purchase Warrant issued in July 2010 Series B Preferred Stock offering (incorporated by reference to Exhibit 4.1 to our Form 8-K filed July 20, 2010)
4.6	Form of Placement Agent Warrant issued in July 2010 Series B Preferred Stock offering (incorporated by reference to Exhibit 4.2 to our Form 8-K filed July 20, 2010)
4.7	Form of Common Stock Purchase Warrant used for Series B Preferred Stock offering (incorporated by reference to Exhibit 4.1 of the Form 8-K filed October 22, 2010).

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4.8	Form of Common Stock Purchase Warrant used for the Series D Preferred Stock offering (incorporated by reference to Exhibit 4.1 of the Form 8-K filed February 15, 2011).
4.9	Form of Common Stock Purchase Warrant issued in August 2011 offering (incorporated by reference to Exhibit 4.1 to our Form 8-K filed August 4, 2011)
4.10	Form of Amended and Restated Common Stock Purchase Warrant issued to our prior 12.5% Note holders (incorporated by reference to Exhibit 10.5 of the Form 8-K filed October 9, 2012).
10.1	Securities Purchase Agreement dated October 13, 2009 between the Company and the Series A Preferred Stock Purchasers (incorporated by reference to Exhibit 10.1 to our Form 8-K filed October 14, 2009)
**10.2	2009 Equity Incentive Plan, as amended (incorporated by reference to Exhibit 10.1 to our Form 10-Q filed November 14, 2012)
10.3	Lease Agreement between Isolagen, Inc and The Hankin Group dated April 7, 2005 (incorporated by reference to Exhibit 10.1 to our Form 8-K filed on April 12, 2005)
10.4	Purchase Option Agreement between Isolagen, Inc and 405 Eagleview Associates dated April 7, 2005 (incorporated by reference to Exhibit 10.2 to our Form 8-K filed on April 12, 2005)
10.5	Intellectual Property Purchase Agreement between Isolagen Technologies, Inc., Gregory M. Keller, and PacGen Partners (incorporated by reference to Exhibit 10.13 to the company s amended Form S-1, as filed on October 24, 2003)
10.6	Securities Purchase Agreement dated March 2, 2010 (incorporated by reference to Exhibit 10.1 to our Form 8-K filed March 3, 2010)
10.7	Registration Rights Agreement dated March 2, 2010 (incorporated by reference to Exhibit 10.2 to our Form 8-K filed March 3, 2010)
10.8	Registration Rights Agreement between the Company and the Series A Preferred Stock Purchasers, dated October 13, 2009 (incorporated by reference to Exhibit 10.2 to our Form 8-K filed October 14, 2009)
10.9	Securities Purchase Agreement between the Company and Series B Preferred Stock Purchasers (incorporated by reference to Exhibit 10.1 to our Form 8-K filed July 20, 2010)
10.10	Form of Registration Rights Agreement between the Company and Series B Preferred Stock Purchasers (incorporated by reference to Exhibit 10.2 to our Form 8-K filed July 20, 2010)
10.11	Form of Securities Purchase Agreement between the Company and Series B Preferred Stock Purchasers (incorporated by reference to Exhibit 4.1 of the Form 8-K filed October 22, 2010).
10.12	Securities Purchase Agreement dated August 3, 2011 (incorporated by reference to Exhibit 10.1 to our Form 8-K filed August 4, 2011)
10.13	Registration Rights Agreement dated August 3, 2011 (incorporated by reference to Exhibit 10.2 to our Form 8-K filed August 4, 2011)
10.14	Amendment to Lease Agreement between Fibrocell Science, Inc. and The Hankin Group dated February 17, 2012 (incorporated by reference to Exhibit 10.17 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2011)
10.15	Securities Purchase Agreement dated October 5, 2012 (incorporated by reference to Exhibit 10.1 to our Form 8-K filed October 9, 2012)
10.16	Registration Rights Agreement dated October 5, 2012 (incorporated by reference to Exhibit 10.2 to our Form 8-K filed October 5, 2012)
10.17	Stock Issuance Agreement dated October 5, 2012 between the Company and Intrexon Corporation (incorporated by reference to Exhibit 10.3 to our Form 8-K filed October 5, 2012)
10.18	Amendment and Conversion Agreement dated October 5, 2012 between the Company and the Holders

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	of the Company s Notes (incorporated by reference to Exhibit 10.4 to our Form 8-K filed October 5, 2012)
+ 10.19	Exclusive Channel Collaboration Agreement between Intrexon Corporation and Fibrocell Science, Inc. (incorporated by reference to Exhibit 10.21 of the Form 10-K filed on April 1, 2013)
10.20	Employment Transition Letter between Fibrocell Science, Inc. and Declan Daly dated June 28, 2013 (incorporated by reference to Exhibit 10.1 of the Form 8-K filed on June 28, 2013)
10.21	First Amendment to Exclusive Channel Collaboration Agreement between the Company and Intrexon Corporation dated June 28, 2013 (incorporated by reference to Exhibit 10.1 of the Form 8-K filed on July 1, 2013)
10.22	Supplemental Stock Issuance Agreement between the Company and Intrexon Corporation dated June 28, 2013 (incorporated by reference to Exhibit 10.2 of the Form 8-K filed on July 1, 2013)
+ 10.23	Massachusetts Institute of Technology Office of Sponsored Programs Research Agreement (incorporated by reference to Exhibit 10.1 of the Form 10-Q filed on November 14, 2013)
10.24	The Regents of the University of California Research Agreement (incorporated by reference to Exhibit 10.2 of the Form 10-Q filed on November 14, 2013)
** 10.25	Employment Agreement between the Company and Gregory Weaver dated August 26, 2013 (incorporated by reference to Exhibit 10.1 of the Form 8-K filed on August 26, 2013)
** 10.26	Stock Option Agreement between the Company and Gregory Weaver issued pursuant to Employment Agreement between the Company and Gregory Weaver dated August 26, 2013 (incorporated by reference to Exhibit 10.4 of the Form 10-Q filed on November 14, 2013)
**10.27	Employment Agreement between the Company and David Pernock dated November 15, 2013 (incorporated by reference to Exhibit 10.1 to our Form 8-K filed November 18, 2013)
10.28	Second Amendment to Exclusive Channel Collaboration Agreement between the Company and Intrexon Corporation dated January 10, 2014 (incorporated by reference to Exhibit 10.1 of the Form 8-K filed on January 13, 2014)
10.29	Supplemental Stock Issuance Agreement between the Company and Intrexon Corporation dated January 10, 2014 (incorporated by reference to Exhibit 10.2 of the Form 8-K filed on January 13, 2014)
21	List of Subsidiaries. (incorporated by reference to Exhibit 21 of the Form 10-K filed on April 1, 2013)
*23.1	Consent of BDO USA, LLP
*31.1	Certification pursuant to Rule 13a-14(a) and 15d-14(a), required under Section 302 of the Sarbanes-Oxley Act of 2002
*31.2	Certification pursuant to Rule 13a-14(a) and 15d-14(a), required under Section 302 of the Sarbanes-Oxley Act of 2002
*32.1	Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
*32.2	Certification pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document. (1)
101.SCH	XBRL Taxonomy Extension Schema Document. (1)
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document. (1)
101.LAB	XBRL Taxonomy Extension Label Linkbase Document. (1)
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document. (1)

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101.DEF XBRL Taxonomy Extension Definition Linkbase Document. (1)

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* Filed herewith.

** Indicates management contract or compensatory plan or arrangement.

+ Confidential treatment has been granted as to certain portions of this exhibit pursuant to Rule 406 of the Securities Act of 1933, as amended, or Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

(1) Pursuant to Rule 406T of Regulation S-T, the Interactive Data Files on Exhibit 101 hereto are deemed not filed or part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, are deemed not filed for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended, and otherwise are not subject to liability under those sections.

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SIGNATURES

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

FIBROCELL SCIENCE, INC.

By: /s/ David Pernock
David Pernock
Chief Executive Officer

Date: June 2, 2014

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

Signature	Title	Date
/s/ David Pernock David Pernock	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)	June 2, 2014
/s/ Gregory Weaver Gregory Weaver	Chief Financial Officer (Principal Financial and Accounting Officer)	June 2, 2014
/s/ Kelvin Moore Kelvin Moore	Director	June 2, 2014
/s/ Marc Mazur Marc Mazur	Director	June 2, 2014
/s/ Julian Kirk Julian Kirk	Director	June 2, 2014
/s/ Marcus Smith Marcus Smith	Director	June 2, 2014
/s/ Christine St. Clare Christine St. Clare	Director	June 2, 2014
/s/ Douglas J. Swirsky Douglas J. Swirsky	Director	June 2, 2014

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Fibrocell Science, Inc.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Fibrocell Science, Inc.

Exton, Pennsylvania

We have audited the accompanying consolidated balance sheets of Fibrocell Science, Inc. as of December 31, 2013, 2012 and 2011 and the related consolidated statements of operations, shareholders equity (deficit) and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Fibrocell Science, Inc. at December 31, 2013, 2012 and 2011, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

As more fully discussed in Note 3, the Company has restated the accompanying consolidated financial statements as of and for the years ended December 31, 2013, 2012, and 2011 to correct an error in the classification of and accounting for warrants.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Fibrocell Science, Inc. s internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated March 17, 2014 , except for the effects of the material weakness described in the sixth paragraph of the report, as to which the date is June 2, 2014, expressed an adverse opinion thereon.

/s/ BDO USA, LLP

Philadelphia, PA

March 17, 2014 except for the effects of the matters described in Note 3, as to which is dated June 2, 2014

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Fibrocell Science, Inc.

Exton, Pennsylvania

We have audited Fibrocell Science, Inc. s internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Fibrocell Science, Inc. s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A, Management s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company s internal control over financial reporting based on our audit.

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 effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our report dated March 17, 2014, we expressed an unqualified opinion on the effectiveness of internal control over financial reporting as of December 31, 2013. Subsequent to March 17, 2014, management of Fibrocell Science, Inc. identified a material misstatement in the Company s annual consolidated financial statements for 2013, 2012, and 2011, requiring restatement of such financial statements. Management revised its assessment of internal control over financial reporting due to the identification of a material weakness, described in the following paragraph, in connection with the financial statement restatement. Accordingly, our opinion on the effectiveness of Fibrocell Science Inc. s internal control over financial reporting as of December 31, 2013 expressed herein is different from that expressed in our previous report.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company s annual or interim financial statements will not be prevented or detected on a timely basis. A material weakness occurred regarding management s failure to design and maintain controls related to the initial classification and subsequent accounting of warrants as liability or equity instruments. This material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audits of the 2013, 2012, and 2011 financial statements (as restated).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Fibrocell Science, Inc. as of December 31, 2013, 2012 and 2011 and the related consolidated statements of operations, shareholders equity (deficit) and cash flows for the years then ended and our report dated March 17, 2014, except as to Note 3, which is dated June 2, 2014, expressed an unqualified opinion thereon.

/s/ BDO USA, LLP

Philadelphia, PA

Date of original audit report March 17, 2014, except as to the effect of the material weakness, which is dated June 2, 2014

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Fibrocell Science, Inc.

Consolidated Balance Sheets

($ in thousands, except per share data)

	December 31, 2013 (Restated)	December 31, 2012 (Restated)	December 31, 2011 (Restated)
Assets			
Current assets:			
Cash and cash equivalents	$ 60,033	$ 31,346	$ 10,799
Accounts receivable, net of allowance for doubtful accounts of $5, $25, and $0, respectively	28	62	27
Inventory	597	477	
Prepaid expenses and other current assets	1,202	1,271	1,175
Current assets of discontinued operations			498
Total current assets	61,860	33,156	12,499
Property and equipment, net	1,701	1,658	1,434
Intangible assets, net of accumulated amortization of $1,102, $551, and $0, respectively	5,238	5,789	6,341
Other assets	215		
Total assets	$ 69,014	$ 40,603	$ 20,274
Liabilities and Stockholders Equity			
Current liabilities:			
Current Debt	$	$	$ 6,731
Accounts payable	2,958	921	1,887
Accrued expenses	487	494	918
Deferred revenue	148	139	56
Current liabilities of discontinued operations			20
Total current liabilities	3,593	1,554	9,612
Deferred tax liability			2,500
Warrant liability	15,216	14,515	23,754
Derivative liability			534
Other long term liabilities	539	344	142
Total liabilities	19,348	16,413	36,542
Commitments:			
Preferred stock series A, $0.001 par value; 0, 9,000 and 9,000 shares authorized, respectively; 0, 3,250 and 3,250 shares issued, respectively; no shares outstanding			
Preferred stock series B, $0.001 par value; 0, 9,000 and 9,000 shares authorized respectively; 0, 4,640 and 4,640 shares issued respectively; no shares outstanding			
Preferred stock series B, $0.001 par value; subscription receivable			
Preferred stock series D, $0.001 par value; 0, 8,000 and 8,000 shares authorized; 0, 7,779 and 7,779 shares issued, respectively; 0, 0 and 3,641 shares outstanding, respectively			
Preferred stock series E, $0.001 par value; 0, 12,000 and 0 shares authorized, respectively; 0, 9,141 and 0 shares issued, respectively; no shares outstanding			
Stockholders equity:			

Preferred stock, $0.001 par value; 5,000,000 shares authorized; no shares outstanding			
Common stock, $0.001 par value; 100,000,000, 1,100,000,000 and 1,100,000,000 shares authorized, respectively; 39,832,225, 26,229,909, and 3,827,132 shares issued and outstanding, respectively	40	26	4
Common stock subscription receivable		(2,004)	(550)
Additional paid-in capital	136,694	81,682	27,081
Accumulated deficit	(87,068)	(55,514)	(43,271)
Total stockholders equity (deficit)	49,666	24,190	(16,736)
Noncontrolling interest			468
Total stockholders equity (deficit) and noncontrolling interest	49,666	24,190	(16,268)
Total liabilities and stockholders equity	$ 69,014	$ 40,603	$ 20,274

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

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Fibrocell Science, Inc.

Consolidated Statements of Operations

($ in thousands, except per share data)

	Year ended December 31, 2013 (Restated)	Year ended December 31, 2012 (Restated)	Year ended December 31, 2011 (Restated)
Revenue from product sales	$ 200	$ 153	$
Cost of sales	8,052	8,355	13
Gross loss	(7,852)	(8,202)	(13)
Selling, general and administrative expenses	10,073	12,167	12,795
Research and development expenses	12,578	9,021	7,171
Operating loss	(30,503)	(29,390)	(19,979)
Other income (expense):			
Warrant revaluation and other finance income (expense)	(1,053)	20,404	2,562
Derivative revaluation expense		(23)	(5,452)
Interest income (expense)	2	(1,017)	(1,062)
Loss on extinguishment of debt		(5,617)	
Loss from continuing operations before income taxes	(31,554)	(15,643)	(23,931)
Deferred tax benefit		2,500	
Loss from continuing operations	(31,554)	(13,143)	(23,931)
Loss from discontinued operations, net of tax		(11)	(94)
Gain on sale of discontinued operations, net of tax		467	
Net loss	(31,554)	(12,687)	(24,025)
Net loss attributable to non-controlling interest		(24)	(18)
Net loss attributable to Fibrocell Science, Inc. common stockholders	$ (31,554)	$ (12,711)	$ (24,043)
Per Share Information:			
Loss from continuing operations - basic	$ (1.06)	$ (1.47)	$ (10.91)
Loss from discontinued operations, net of tax - basic			(0.04)
Gain on sale of discontinued operations, net of tax - basic		0.05	
Net loss attributable to non-controlling interest, basic			(0.01)
Net loss per common share - basic	$ (1.06)	$ (1.42)	$ (10.96)
Loss from continuing operations - diluted	$ (1.12)	$ (2.65)	$ (10.99)
Loss from discontinued operations, net of tax - diluted			(0.04)
Gain on sale of discontinued operations, net of tax - diluted		0.05	
Net loss attributable to non-controlling interest, diluted			(0.01)
Net loss per common share - diluted	$ (1.12)	$ (2.60)	$ (11.04)
Weighted average number of common shares outstanding			
Basic	29,830,207	8,965,098	2,194,301
Diluted	30,196,215	9,147,060	2,240,974

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Fibrocell Science, Inc.

Consolidated Statements of Stockholders Equity (Deficit)

($ in thousands)

	Common Stock Shares	Amount	Subscription receivable	Additional paid-in capital	Accumulated deficit	Noncontrolling interest	Total Equity (Deficit)
Balance, December 31, 2010 (Restated)	815,021	$ 1	$	$ (940)	$ (19,228)	$ 450	$ (19,717)
Proceeds from equity financing, net	1,732,734	2	(550)	22,716			22,168
Fair value of warrants issued with financing				(9,264)			(9,264)
Preferred stock series A, B and D converted	933,120	1		8,493			8,494
Stock-based compensation expense				2,900			2,900
Stock options exercised	9,846						
Exercise of warrants	336,411			3,176			3,176
Net loss					(24,043)	18	(24,025)
Balance, December 31, 2011 (Restated)	3,827,132	$ 4	$ (550)	$ 27,081	$ (43,271)	$ 468	$ (16,268)
Proceeds from equity financing, net	18,203,000	18	(2,004)	42,171			40,185
Fair value of warrants issued with financing				1,098			1,098
Preferred stock series D and E converted	2,021,120	2		1,348			1,350
Conversion of note payable	898,641	1		2,384			2,385
Issuance of common stock	1,317,520	1		6,916			6,917
Cancellation of certificate	(40,000)		550	(550)			
Stock-based compensation expense				1,224			1,224
Exercise of warrants	2,496			10			10
Net loss					(12,243)	(468)	(12,711)
Balance, December 31, 2012 (Restated)	26,229,909	$ 26	$ (2,004)	$ 81,682	$ (55,514)	$	$ 24,190
Proceeds from equity financing, net	12,311,698	12		47,106			47,118
Subscription received			2,004				2,004
Issuance of common stock	1,243,781	2		6,404			6,406
Exercise of warrants	46,837			352			352
Stock-based compensation expense				1,150			1,150
Net loss					(31,554)		(31,554)
Balance, December 31, 2013 (Restated)	39,832,225	$ 40	$	$ 136,694	$ (87,068)	$	$ 49,666

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

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Fibrocell Science, Inc.

Consolidated Statements of Cash Flows

($ in thousands)

	Year ended December 31, 2013 (Restated)	Year ended December 31, 2012 (Restated)	Year ended December 31, 2011 (Restated)
Cash flows from operating activities:			
Net loss	$ (31,554)	$ (12,687)	$ (24,025)
Adjustments to reconcile net loss to net cash used in operating activities:			
Loss on extinguishment of debt		5,617	
Gain on sale of Agera		(467)	
Stock issued for exclusive channel collaboration agreement	6,406	6,917	
Stock-based compensation expense	1,150	1,224	2,900
Warrant revaluation and other finance (income) expense	1,053	(20,404)	(2,562)
Derivative revaluation expense		23	5,452
Deferred tax benefit		(2,500)	
Loss on disposal of property and equipment	5		
Depreciation and amortization	863	821	158
Provision for doubtful accounts	(20)	25	18
Provision for excessive and/or obsolete inventory			(46)
Amortization of debt issuance costs		146	
Change in operating assets and liabilities:			
Accounts receivable	54	(60)	(4)
Other receivables			(1)
Inventory	(120)	(477)	38
Prepaid expenses	69	(196)	(437)
Other assets	(215)		
Accounts payable	2,037	(966)	803
Accrued expenses and other liabilities	188	407	816
Deferred revenue	9	83	55
Miscellaneous other		(81)	(2)
Net cash used in operating activities	(20,075)	(22,575)	(16,837)
Cash flows from investing activities:			
Purchase of property and equipment	(360)	(493)	(1,570)
Proceeds from the sale of Agera		1,002	
Net cash (used in) provided by investing activities	(360)	509	(1,570)
Cash flows from financing activities:			
Debt issuance costs		(46)	(100)
Net proceeds from preferred stock		7,864	5,836
Proceeds from the exercise of warrants			2,419
Net proceeds from common stock	47,118	40,185	22,168
Subscription received	2,004		
Payments on insurance loan		(97)	(81)
Principal payments on note payable		(4,823)	(1,283)
Dividends paid on preferred stock		(470)	(623)
Net cash provided by financing activities	49,122	42,613	28,336
Effect of exchange rate changes on cash balances			3
Net increase in cash and cash equivalents	28,687	20,547	9,931
Cash and cash equivalents, beginning of period	31,346	10,799	868

Cash and cash equivalents, end of period	$ 60,033	$ 31,346	$ 10,799

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

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Fibrocell Science, Inc.

Notes to Consolidated Financial Statements

Note 1. Business and Organization

Fibrocell Science, Inc. (Fibrocell or the Company) is the parent company of Fibrocell Technologies (Fibrocell Tech) and Fibrocell Science Hong Kong Limited (Fibrocell Hong Kong), a company organized under the laws of Hong Kong. Fibrocell Tech is the parent company of Isolagen Europe Limited, a company organized under the laws of the United Kingdom (Isolagen Europe), Isolagen Australia Pty Limited, a company organized under the laws of Australia (Isolagen Australia), and Isolagen International, S.A., a company organized under the laws of Switzerland (Isolagen Switzerland). The Company s international activities are currently immaterial.

Fibrocell is an autologous cell therapy company primarily focused on developing first-in-class treatments for skin diseases and conditions with high unmet medical needs. Based on its proprietary autologous fibroblast technology, the Company is pursuing medical applications of azficel-T for restrictive burn scarring and vocal cord scarring. The Company s collaboration with Intrexon Corporation (NYSE:XON) (Intrexon), a leader in synthetic biology, includes using genetically-modified fibroblasts for treating orphan skin diseases for which there are no currently approved products and exploring the localized treatment of the most common autoimmune skin disease, moderate-to-severe psoriasis. The Company s collaboration with UCLA, focusing on skin-derived stem cells and more efficient ways to convert skin cells to other cell types, holds potential for future discovery and development of autologous cell therapeutics.

The Company previously marketed a skin care line with broad application in core target markets through its consolidated subsidiary, Agera Laboratories, Inc. (Agera), which was sold on August 31, 2012. The Company had owned 57% of the outstanding shares of Agera. As a result of the sale of Agera, the Company operates in one segment and Agera is classified as discontinued operations. Please refer to Note 17 for more details.

The Company transitioned from its development stage to operational activities as of July 1, 2012. As such, the financial statements have been updated to reflect that the Company is no longer a development stage company.

Note 2. Basis of Presentation

On April 30, 2013, the Company completed a reverse stock split on the basis of one share of common stock for each currently outstanding 25 shares of pre-split common stock. All common share and per share data included in these financial statements reflect this reverse stock split.

Note 3. Restatement of Consolidated Financial Statements

On May 6, 2014, the Company s management, with consultation from the Audit Committee of the Company s Board of Directors (the Audit Committee), concluded that, because of a misapplication of the accounting guidance related to certain of the Company s warrants, the Company s previously issued consolidated financial statements for all periods beginning with the quarterly period ended September 30, 2011 through December 31, 2013 (collectively, the Affected Periods) should no longer be relied upon. As such, the Company anticipates restating its financial statements for the following periods: (i) the fiscal years ended December 31, 2013, December 31, 2012 and December 31, 2011, (ii) all quarterly periods of 2013 and 2012 and (iii) the quarterly period ending September 30, 2011. However, these restatements result in non-cash, non-operating expense corrections and will have no impact on the Company s current or previously reported cash position, operating expenses or total operating, investing or financing cash flows, or net operating loss carryforward. The impact of such restatements on the first two quarters of 2011 and earlier was immaterial. The Company s December 31, 2010 opening balances were adjusted to reflect the cumulative impact of these restatements as a decrease in additional paid-in capital of $3.4 million and an increase in accumulated deficit of $1.2 million, for a total change to stockholders deficit of $4.6 million.

The warrants at issue (collectively, the Warrants) consist of the following:

1. warrants to purchase an aggregate of 15,080 shares of common stock, issued on October 13, 2009 at an exercise price of $6.25 per share issued to placement agents;

2. Series A, class A warrants to purchase 115,440 shares of common stock, issued on October 13, 2009 at an exercise price of $6.25 per share;

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3. Series A, class B warrants to purchase 130,004 shares of common stock, issued on October 13, 2009 at an exercise price of $6.25 per share;

4. warrants to purchase an aggregate of 393,416 shares of common stock, issued on March 4, 2010 at an exercise price of $6.25 per share;

5. warrants to purchase 6,113 shares of common stock, issued on June 16, 2011 at an exercise price of $22.50 per share issued to placement agents;

6. warrants to purchase 50,123 shares of common stock, issued on August 22, 2011 at an exercise price of $13.635 per share issued to placement agents;

7. warrants to purchase 565,759 shares of common stock, issued on August 22, 2011 at an exercise price of $18.75 per share;

8. warrants to purchase an aggregate of 1,125,578 shares of common stock, issued on June 1, 2012 at an exercise price of $2.50 per share;

9. warrants to purchase an aggregate of 1,217,816 shares of common stock, issued on various dates in 2010 and 2011 at an exercise price of $6.25 per share;

10. warrants to purchase an aggregate of 1,568,823 shares of common stock, issued on various dates in 2012 at an exercise price of $7.50; and

11. warrants to purchase an aggregate of 768,778 shares of common stock, issued on various dates in 2010 at an exercise price of $6.25.

The above warrant shares and exercise prices have been retroactively adjusted to reflect the April 30, 2013 reverse stock split.

Of the Warrants, approximately 5,335,000 were originally and correctly classified as liabilities on the Company s balance sheets. In connection with the Company s October 2012 financing and a contemporaneous modification of those Warrants to remove down-round anti-dilution protection, such Warrants were erroneously reclassified as a component of equity as opposed to liabilities on the balance sheets. The corresponding statements of operations did not include the subsequent non-cash changes in the estimated fair value of such Warrants. Those Warrants, however, continued to contain a cash settlement feature regarding fundamental transactions that allowed those Warrant holders to have a different settlement option than the Company s stockholders upon certain fundamental transactions, including a change of control of the Company, thereby precluding equity treatment for the Warrants. In the course of management s investigation, the Company also reviewed the Warrant agreements for approximately 622,000 Warrants that were originally classified as equity instruments upon their issuance. Those Warrants contained a similar fundamental transaction settlement provision that precluded equity treatment for such Warrants.

Under the guidance of Accounting Standards Codification, *Derivatives and Hedging*, (ASC 815), warrant instruments that could potentially require net cash settlement in the absence of express language precluding such settlement and those which include down-round provisions should be initially classified as derivative liabilities at their estimated fair values, regardless of the likelihood that such instruments will ever be settled in cash. In periods subsequent to issuance, changes in the estimated fair value of the derivative instruments should be reported in the statement of operations. The Audit Committee, together with management, determined that the financial statements in the Affected Periods should be restated to reflect the Warrants as liabilities, with subsequent changes in their estimated fair value recorded as non-cash income or expense in each Affected Period.

The impact of the restatement on the condensed consolidated balance sheet, statement of operations and statement of cash flows for the Restated Periods is presented below, (audited or unaudited as noted). The restatement had no impact on net cash flows from operating, investing or financing activities as the adjustments resulting from the non-cash change in the fair value of the warrant liability for each period and the statements of operations only impacted net income (loss) from continuing operations. In addition to the restatement noted above, the consolidated statements of operations and the consolidated balance sheets have also been retroactively adjusted to give effect to the Company s April 2013 reverse stock split.

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Impact of the Restatement - 2013

($ in thousands except per share amounts)

	Year Ended December 31, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data:			
Warrant revaluation and other finance income (expense)	$ (134)	$ (919)	$ (1,053)
Loss from continuing operations before income taxes	(30,635)	(919)	(31,554)
Loss from continuing operations	(30,635)	(919)	(31,554)
Net loss	(30,635)	(919)	(31,554)
Loss from continuing operations per share, basic	$ (1.03)	$ (0.03)	$ (1.06)
Loss from continuing operations per share, diluted	$ (1.03)	$ (0.09)	$ (1.12)
Net loss per share, basic	$ (1.03)	$ (0.03)	$ (1.06)
Net loss per share, diluted	$ (1.03)	$ (0.09)	$ (1.12)

	As of December 31, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Balance Sheet Data:			
Warrant liability	$ 210	$ 15,006	$ 15,216
Total liabilities	4,342	15,006	19,348
Additional paid-in capital	167,342	(30,648)	136,694
Accumulated deficit	(102,710)	15,642	(87,068)
Total stockholders equity	64,672	(15,006)	49,666

	Year Ended December 31, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Cash Flows Data:			
Net loss	$ (30,635)	$ (919)	$ (31,554)
Increase in fair value of warrants	134	919	1,053

	Three Months Ended September 30, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ 188	$ 6,332	$ 6,520
Loss from continuing operations before income taxes	(12,933)	6,332	(6,601)
Loss from continuing operations	(12,933)	6,332	(6,601)
Net loss	(12,937)	6,332	(6,605)
Loss from continuing operations per share, basic	$ (0.48)	$ 0.24	$ (0.24)
Loss from continuing operations per share, diluted	$ (0.48)	$ 0.17	$ (0.31)
Net loss per share, basic	$ (0.48)	$ 0.24	$ (0.24)
Net loss per share, diluted	$ (0.48)	$ 0.17	$ (0.31)

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	Nine Months Ended September 30, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ (129)	$ (831)	$ (960)
Loss from continuing operations before income taxes	(24,968)	(831)	(25,799)
Loss from continuing operations	(24,968)	(831)	(25,799)
Net loss	(24,981)	(831)	(25,812)
Loss from continuing operations per share, basic	$ (0.94)	$ (0.03)	$ (0.97)
Loss from continuing operations per share, diluted	$ (0.94)	$ (0.10)	$ (1.04)
Net loss per share, basic	$ (0.94)	$ (0.03)	$ (0.97)
Net loss per share, diluted	$ (0.94)	$ (0.10)	$ (1.04)

	As of September 30, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Balance Sheet Data (unaudited)::			
Warrant liability	$ 205	$ 14,919	$ 15,124
Total liabilities	3,317	14,919	18,236
Additional paid-in capital	120,014	(30,649)	89,635
Accumulated deficit	(97,056)	15,730	(81,326)
Total stockholders equity	22,986	(14,919)	8,067

	Nine Months Ended September 30, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Cash Flows Data (unaudited):			
Net loss	$ (24,981)	$ (831)	$ (25,812)
Decrease in fair value of warrants	129	831	960

	Three Months Ended June 30, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ (375)	$ (8,443)	$ (8,818)
Loss from continuing operations before income taxes	(6,189)	(8,443)	(14,632)
Loss from continuing operations	(6,189)	(8,443)	(14,632)
Net loss	(6,194)	(8,443)	(14,637)
Loss from continuing operations per share, basic	$ (0.46)	$ (0.17)	$ (0.63)
Loss from continuing operations per share, diluted	$ (0.46)	$ (0.17)	$ (0.63)
Net loss per share, basic	$ (0.46)	$ (0.17)	$ (0.63)
Net loss per share, diluted	$ (0.46)	$ (0.17)	$ (0.63)

	Six Months Ended June 30, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ (317)	$ (7,163)	$ (7,480)
Loss from continuing operations before income taxes	(12,035)	(7,163)	(19,198)
Loss from continuing operations	(12,044)	(7,163)	(19,207)
Net loss	(12,044)	(7,163)	(19,207)
Loss from continuing operations per share, basic	$ (0.24)	$ (0.49)	$ (0.73)
Loss from continuing operations per share, diluted	$ (0.24)	$ (0.50)	$ (0.74)
Net loss per share, basic	$ (0.24)	$ (0.49)	$ (0.73)
Net loss per share, diluted	$ (0.24)	$ (0.50)	$ (0.74)

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	As of June 30, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Balance Sheet Data (unaudited):			
Warrant liability	$ 653	$ 21,324	$ 21,977
Total liabilities	2,812	21,324	24,136
Additional paid-in capital	112,631	(30,721)	81,910
Accumulated deficit	(84,119)	9,398	(74,721)
Total stockholders equity	26,538	(21,324)	5,214

	Six Months Ended June 30, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Cash Flows Data (unaudited):			
Net loss	$ (12,044)	$ (7,163)	$ (19,207)
Decrease in fair value of warrants	317	7,163	7,480

	Three Months Ended March 31, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ 58	$ 1,280	$ 1,338
Loss from continuing operations before income taxes	(5,846)	1,280	(4,566)
Loss from continuing operations	(5,846)	1,280	(4,566)
Net loss	(5,850)	1,280	(4,570)
Loss from continuing operations per share, basic	$ (0.22)	$ 0.05	$ (0.17)
Loss from continuing operations per share, diluted	$ (0.22)	$ 0.04	$ (0.18)
Net loss per share, basic	$ (0.22)	$ 0.05	$ (0.17)
Net loss per share, diluted	$ (0.22)	$ 0.04	$ (0.18)

	As of March 31, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Balance Sheet Data (unaudited):			
Warrant liability	$ 316	$ 12,862	$ 13,178
Total liabilities	2,462	12,862	15,324
Additional paid-in capital	112,557	(30,703)	81,854
Accumulated deficit	(77,925)	17,841	(60,084)
Total stockholders equity	32,654	(12,862)	19,792

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	Three Months Ended March 31, 2013		
	As Previously Reported	Adjustment	As Restated
Consolidated Cash Flows Data (unaudited):			
Net loss	$ (5,850)	$ 1,280	$ (4,570)
Decrease in fair value of warrants	(58)	(1,280)	(1,338)

Impact of the Restatement - 2012

($ in thousands except per share amounts)

	Year Ended December 31, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data:			
Warrant revaluation and other finance income (expense)	$ 8,725	$ 11,679	$ 20,404
Loss on extinguishment of debt	(4,421)	(1,196)	(5,617)
Loss from continuing operations before income taxes	(26,126)	10,483	(15,643)
Loss from continuing operations	(23,626)	10,483	(13,143)
Net loss	(23,170)	10,483	(12,687)
Loss from continuing operations per share, basic	$ (2.59)	$ 1.17	$ (1.42)
Loss from continuing operations per share, diluted	$ (2.59)	$ (0.01)	$ (2.60)
Net loss per share, basic	$ (2.59)	$ 1.17	$ (1.42)
Net loss per share, diluted	$ (2.59)	$ (0.01)	$ (2.60)

	As of December 31, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Balance Sheet Data:			
Warrant liability	$ 374	$ 14,141	$ 14,515
Total liabilities	2,272	14,141	16,413
Additional paid-in capital	112,384	(30,702)	81,682
Accumulated deficit	(72,075)	16,561	(55,514)
Total stockholders equity	38,331	(14,141)	24,190

	Year Ended December 31, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Cash Flows Data:			
Net loss	$ (23,194)	$ 10,507	$ (12,687)
Loss on extinguishment of debt	4,421	1,196	5,617
Decrease in fair value of warrants	(8,725)	(11,679)	(20,404)

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	Three Months Ended September 30, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ 14,545	$ (2,819)	$ 11,726
Loss from continuing operations before income taxes	10,989	(2,819)	8,170
Loss from continuing operations	10,989	(2,819)	8,170
Net loss	11,437	(2,819)	8,618
Loss from continuing operations per share, basic	$	$ 2.18	$ 2.18
Loss from continuing operations per share, diluted	$	$ 1.35	$ 1.35
Net loss per share, basic	$ 3.00	$ (0.82)	$ 2.18
Net loss per share, diluted	$ (1.25)	$ 2.60	$ 1.35

	Nine Months Ended September 30, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ 17,192	$ 2,276	$ 19,468
Loss on extinguishment of debt	(4,421)	290	(4,131)
Loss from continuing operations before income taxes	(4,581)	2,567	(2,014)
Loss from continuing operations	(2,081)	2,567	486
Net loss	(1,639)	2,567	928
Loss from continuing operations per share, basic	$	$ 0.23	$ 0.23
Loss from continuing operations per share, diluted	$	$ (1.99)	$ (1.99)
Net loss per share, basic	$ (1.00)	$ 1.23	$ 0.23
Net loss per share, diluted	$ (1.00)	$ (0.99)	$ (1.99)

	As of September 30, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Balance Sheet Data (unaudited):			
Warrant liability	$ 6,973	$ 7,002	$ 13,975
Total liabilities	14,787	7,002	21,789
Additional paid-in capital	44,991	(15,647)	29,344
Accumulated deficit	(50,520)	8,645	(41,875)
Total stockholders equity	(6,075)	(7,002)	(13,077)

	Nine Months Ended September 30, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Cash Flows Data (unaudited):			
Net loss	$ (1,639)	$ 2,567	$ 928
Loss on extinguishment of debt	4,421	(290)	4,131
Decrease in fair value of warrants	(17,192)	(2,276)	(19,468)

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	Three Months Ended June 30, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ 3,148	$ (2,285)	$ 863
Loss on extinguishment of debt	(4,421)	290	(4,131)
Loss from continuing operations before income taxes	(9,115)	(1,995)	(11,110)
Loss from continuing operations	(9,060)	(2,050)	(11,110)
Net loss	(9,059)	(2,050)	(11,109)
Loss from continuing operations per share, basic	$ (2.35)	$ (0.52)	$ (2.87)
Loss from continuing operations per share, diluted	$ (2.35)	$ (3.00)	$ (5.35)
Net loss per share, basic	$ (2.35)	$ (0.52)	$ (2.87)
Net loss per share, diluted	$ (2.35)	$ (3.00)	$ (5.35)

	Six Months Ended June 30, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ 2,647	$ 5,095	$ 7,742
Loss on extinguishment of debt	(4,421)	290	(4,131)
Loss from continuing operations before income taxes	(15,570)	5,386	(10,184)
Loss from continuing operations	(13,072)	5,386	(7,684)
Net loss	(13,076)	5,386	(7,690)
Loss from continuing operations per share, basic	$ (3.39)	$ 1.39	$ (2.00)
Loss from continuing operations per share, diluted	$ (3.39)	$ (1.25)	$ (4.64)
Net loss per share, basic	$ (3.39)	$ 1.39	$ (2.00)
Net loss per share, diluted	$ (3.39)	$ (1.25)	$ (4.64)

	As of June 30, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Balance Sheet Data (unaudited):			
Warrant liability	$ 20,839	$ 4,497	$ 25,336
Total liabilities	29,860	4,497	34,357
Additional paid-in capital	44,513	(15,961)	28,552
Accumulated deficit	(61,956)	11,464	(50,492)
Total stockholders equity	(17,989)	(4,497)	(22,486)

	Six Months Ended June 30, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Cash Flows Data (unaudited):			
Net loss	$ (13,076)	$ 5,386	$ (7,690)
Loss on extinguishment of debt	4,421	(290)	4,131
Decrease in fair value of warrants	(2,647)	(5,095)	(7,742)

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	Three Months Ended March 31, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ (501)	$ 7,381	$ 6,880
Loss from continuing operations before income taxes	(6,455)	7,381	926
Loss from continuing operations	(3,955)	7,381	3,426
Net loss	(3,962)	7,381	3,419
Loss from continuing operations per share, basic	$ (1.04)	$ 1.93	$ 0.89
Loss from continuing operations per share, diluted	$ (1.04)	$ 1.87	$ 0.83
Net loss per share, basic	$ (1.04)	$ 1.93	$ 0.89
Net loss per share, diluted	$ (1.04)	$ 1.87	$ 0.83

	As of March 31, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Balance Sheet Data (unaudited):			
Warrant liability	$ 13,588	$ 3,287	$ 16,875
Total liabilities	23,048	3,287	26,335
Additional paid-in capital	44,164	(16,745)	27,419
Accumulated deficit	(53,322)	13,459	(39,863)
Total stockholders equity	(9,704)	(3,287)	(12,991)
Total deficit and noncontrolling interest	(9,224)	(3,287)	(12,511)

	Three Months Ended March 31, 2012		
	As Previously Reported	Adjustment	As Restated
Consolidated Cash Flows Data (unaudited):			
Net loss	$ (3,962)	$ 7,381	$ 3,419
Increase/(decrease) in fair value of warrants	501	(7,381)	(6,880)

Impact of the Restatement - 2011

($ in thousands except per share amounts)

	Year Ended December 31, 2011		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data:			
Warrant revaluation and other finance income (expense)	$ (4,763)	$ 7,325	$ 2,562
Loss from continuing operations before income taxes	(31,256)	7,325	(23,931)
Loss from continuing operations	(31,256)	7,325	(23,931)
Net loss	(31,350)	7,325	(24,025)
Loss from continuing operations per share, basic	$ (0.57)	$ (10.39)	$ (10.96)
Loss from continuing operations per share, diluted	$ (0.57)	$ (10.47)	$ (11.04)
Net loss per share, basic	$ (0.57)	$ (10.39)	$ (10.96)
Net loss per share, diluted	$ (0.57)	$ (10.47)	$ (11.04)

	As of December 31, 2011		
	As Previously Reported	Adjustment	As Restated
Consolidated Balance Sheet Data:			
Warrant liability	$ 13,087	$ 10,667	$ 23,754
Total liabilities	25,875	10,667	36,542
Common stock	96	(92)	4
Additional paid-in capital	43,735	(16,654)	27,081
Accumulated deficit	(49,349)	6,078	(43,271)
Total stockholders equity	(6,069)	(10,667)	(16,736)

Total deficit and noncontrolling interest	(5,601)	(10,667)	(16,268)

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	Year Ended December 31, 2011		
	As Previously Reported	Adjustment	As Restated
Consolidated Cash Flows Data:			
Net loss	$ (31,349)	$ 7,324	$ (24,025)
Increase/(decrease) in fair value of warrants	4,762	(7,324)	(2,562)
Foreign exchange gain on substantial liquidation of foreign entity	(2)	2	
Increase in miscellaneous other		(2)	(2)

	Three Months Ended September 30, 2011		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ 10,622	$ 1,152	$ 11,774
Loss from continuing operations before income taxes	6,960	1,152	8,112
Loss from continuing operations	6,960	1,152	8,112
Net loss	6,911	1,152	8,063
Loss from continuing operations per share, basic	$ 0.10	$ 2.08	$ 2.18
Loss from continuing operations per share, diluted	$ (0.09)	$ 1.68	$ 1.59
Net loss per share, basic	$ 0.10	$ 2.08	$ 2.18
Net loss per share, diluted	$ (0.09)	$ 1.68	$ 1.59

	Nine Months Ended September 30, 2011		
	As Previously Reported	Adjustment	As Restated
Consolidated Statement of Operations Data (unaudited):			
Warrant revaluation and other finance income (expense)	$ 815	$ 1,668	$ 2,483
Loss from continuing operations before income taxes	(20,245)	1,668	(18,577)
Loss from continuing operations	(20,245)	1,668	(18,577)
Net loss	(20,253)	1,668	(18,585)
Loss from continuing operations per share, basic	$ (0.40)	$ (9.90)	$ (10.30)
Loss from continuing operations per share, diluted	$ (0.40)	$ (9.90)	$ (10.30)
Net loss per share, basic	$ (0.40)	$ (9.90)	$ (10.30)
Net loss per share, diluted	$ (0.40)	$ (9.90)	$ (10.30)

	As of September 30, 2011		
	As Previously Reported	Adjustment	As Restated
Consolidated Balance Sheet Data (unaudited):			
Warrant liability	$ 7,510	$ 16,323	$ 23,833
Total liabilities	20,142	16,323	36,466
Additional paid-in capital	43,513	(16,746)	26,767
Accumulated deficit	(38,316)	422	(37,894)
Total stockholders equity	3,162	(16,323)	(13,161)
Total deficit and noncontrolling interest	3,693	(16,323)	(12,630)

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	Nine Months Ended September 30, 2011		
	As Previously Reported	Adjustment	As Restated
Consolidated Cash Flows Data (unaudited):			
Net loss	$ (20,253)	$ 1,668	$ (18,585)
Decrease in fair value of warrants	(815)	(1,668)	(2,483)

Note 4. Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements in conformity with U.S. Generally Accepted Accounting Principles (GAAP) requires management to make estimates and assumptions that affect the reported amounts in the consolidated financial statements and notes. In addition, management s assessment of the Company s ability to continue as a going concern involves the estimation of the amount and timing of future cash inflows and outflows. Actual results may differ materially from those estimates.

Principles of Consolidation

These consolidated financial statements include the accounts of Fibrocell and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Cash and Cash Equivalents

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

Concentration of Credit Risk

As of December 31, 2013, the Company maintains its operating cash with one major U.S. domestic bank and the remainder of its cash as a money market fund with one major global bank. Federal insurance coverage on our operating cash amounted to $250,000 per depositor at each financial institution, and the Company s non-interest bearing cash balances may exceed federally insured limits. The terms of these deposits are on demand to minimize risk. The Company has not incurred losses related to these deposits.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recorded at the invoiced amount, net of related cash discounts, and do not bear interest. The Company does not have any off-balance sheet exposure related to the Company s customers. The Company maintains an allowance for doubtful accounts related to its accounts receivable that have been deemed to have a high risk of collectability. Management reviews its accounts receivable on a monthly basis to determine if any receivables will potentially be uncollectible. Management analyzes historical collection trends and changes in its customer payment patterns, customer concentration and creditworthiness when evaluating the adequacy of its allowance for doubtful accounts. In its overall allowance for doubtful accounts, the Company includes any receivable balances that are determined to be uncollectible. Based on the information available, management believes the allowance for doubtful accounts is adequate; however, actual write-offs might exceed the recorded allowance.

Inventory

Inventories are determined at the lower of cost or market value, with cost determined under specific identification and on the first-in-first-out method. Inventories consist of raw materials and work-in-process.

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Property and Equipment

Property and equipment is carried at cost less accumulated depreciation. Generally, depreciation for financial reporting purposes is calculated using the straight-line method over the estimated useful life of three years, except for leasehold improvements which are depreciated using the straight-line method over the remaining lease term or the life of the asset, whichever is shorter. The cost of repairs and maintenance is charged to expense as incurred.

Intangible Assets

Intangible assets are research and development assets related to the Company s primary study on azficel-T that was recognized upon emergence from bankruptcy. The portion of the reorganization value which was attributed to identified intangible assets was $6.3 million. This value is related to research and development assets that were not subject to amortization in 2011.

Effective January 1, 2012, the Company launched LAVIV® and as a result, the research and development intangible assets related to the Company s primary study are considered finite-lived intangible assets and are being amortized over 12 years. For each of the years ended December 31, 2013 and 2012, amortization expense was approximately $0.6 million. The Company expects to amortize approximately $0.6 million for each of the next five years.

Finite-lived intangible assets are recorded at cost, net of accumulated amortization and, if applicable, impairment charges. Amortization of finite-lived intangible assets is provided over their estimated useful lives on a straight-line basis. In accordance with Financial Accounting Standards Board Accounting Standard Codification (ASC) 360-10-35 *Impairment or Disposal of Long-Lived Assets*, the Company reviews its finite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. There was no impairment expense recognized for either of the years ended December 31, 2013 or 2012.

Revenue Recognition

The Company recognizes revenue over the period LAVIV® is shipped for injection in accordance with ASC 605 *Revenue Recognition* (ASC 605). In general, ASC 605 requires that four basic criteria must be met before revenue can be recognized: (1) persuasive evidence of an arrangement exists, (2) delivery has occurred or services rendered, (3) the fee is fixed and determinable and (4) collectability is reasonably assured. Revenue from the sale of LAVIV® is not recognized until the first shipment for an injection is shipped.

Cost of Sales

Cost of sales includes the costs related to the processing of cells for LAVIV®, including direct and indirect costs. These direct costs include the majority of costs incurred in our manufacturing, facility, quality control, and quality assurance operations along with an allocation of overhead costs. The principal reason for the relatively small level of revenue as compared to the cost of sales is that we changed corporate strategy in 2013 to de-emphasize sales of azficel-T into the aesthetic markets, and strategically transition to focus on high-value therapeutic applications for treatment of unmet medical conditions of the skin and connective tissue.

Research and Development Expenses

Research and development costs are expensed as incurred and include salaries and benefits, costs paid to third party contractors to perform research, conduct clinical trials, develop and manufacture drug materials and delivery devices, and a portion of facilities cost. Research and development costs also include costs to develop manufacturing, cell collection and logistical process improvements.

Clinical trial costs are a significant component of research and development expenses and include costs associated with third party contractors. Invoicing from third party contractors for services performed can lag several

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months. The Company accrues the costs of services rendered in connection with third party contractor activities based on its estimate of management fees, site management and monitoring costs and data management costs. Actual clinical trial costs may differ from estimated clinical trial costs and are adjusted for in the period in which they become known.

Warrant Liability

The Company accounts for stock warrants as either equity instruments or derivative liabilities depending on the specific terms of the warrant agreement. Stock warrants are accounted for as a derivative in accordance with Accounting Standards Codification 815, *Derivatives and Hedging* (ASC 815) if the stock warrants contain down-round protection or other terms that could potentially require net cash settlement and therefore, do not meet the scope exception for treatment as a derivative. Since down-round protection is not an input into the calculation of the fair value of the warrants, the warrants cannot be considered indexed to the Company s own stock which is a requirement for the scope exception as outlined under ASC 815. Warrant instruments that could potentially require net cash settlement in the absence of express language precluding such settlement and those which include down-round provisions are initially classified as derivative liabilities at their estimated fair values, regardless of the likelihood that such instruments will ever be settled in cash. The Company will continue to classify the fair value of the warrants that contain down-round protection and net cash settlement as a liability until the warrants are exercised, expire or are amended in a way that would no longer require these warrants to be classified as a liability. For additional discussion on warrants, see Note 8.

Preferred Stock and Derivative Liability

The preferred stock has been classified within the mezzanine section between liabilities and equity in its consolidated balance sheets in accordance with ASC 480, Distinguishing Liabilities from Equity (ASC 480) because, prior to the conversion of the preferred stock in October 2012, any holder of Series A, B, D and E Preferred may have required the Company to redeem all of its Series A, B, D or E Preferred in the event of a triggering event which was outside of the control of the Company. All preferred stock was converted in October 2012.

The embedded conversion option for the preferred stock had been recorded as a derivative liability under ASC 815 in the Company s consolidated balance sheet as of December 31, 2011 and was re-measured on the Company s reporting dates until the preferred stock was converted on October 2012. The fair value of the derivative liability was determined using the Black-Scholes option-pricing model and was affected by changes in inputs to that model including our stock price, expected stock price volatility, the expected term, and the risk-free interest rate.

Stock-based Compensation

The Company accounts for stock-based awards to employees using the fair value based method to determine compensation for all arrangements where shares of stock or equity instruments are issued for compensation. In addition, the Company accounts for stock-based compensation to nonemployees in accordance with the accounting guidance for equity instruments that are issued to other than employees. The Company uses a Black-Scholes option-pricing model to determine the fair value of each option grant as of the date of grant for expense incurred. The Black-Scholes model requires inputs for risk-free interest rate, dividend yield, expected stock price volatility and expected life of the options. Expected stock price volatility is based on historical volatility of the Company s stock and the stock of the Company s peer companies. The risk-free interest rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of the

grant. The expected life for options granted represents the period of time that options granted are expected to be outstanding and is derived from the contractual terms of the options granted. The Company estimates future forfeitures of options based upon expected forfeiture rates.

Income Taxes

An asset and liability approach is used for financial accounting and reporting for income taxes. Deferred income taxes arise from temporary differences between income tax and financial reporting and principally relate to recognition of revenue and expenses in different periods for financial and tax accounting purposes and are measured using currently enacted tax rates and laws. In addition, a deferred tax asset can be generated by net operating loss

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(NOLs) carryover. If it is more likely than not that some portion or all of a deferred tax asset will not be realized, a valuation allowance is recognized.

In the event the Company is charged interest or penalties related to income tax matters, the Company would record such interest as interest expense and would record such penalties as other expense in the consolidated statements of operations. No such charges have been incurred by the Company. For each of the years ended December 31, 2013, 2012 and 2011, the Company had no uncertain tax positions.

At December 31, 2013, December 31, 2012 and December 31, 2011, the Company has provided a full valuation allowance for the net deferred tax assets, the large majority of which relates to the future benefit of loss carryovers. In addition, as a result of fresh-start accounting, the Company may be limited by section 382 of the Internal Revenue Service Code. The tax years 2010 through 2013 remain open to examination by the major taxing jurisdictions to which the Company is subject. The deferred tax liability at December 31, 2011, relates to the intangible assets recognized upon fresh-start accounting.

Loss Per Share Data

Basic loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock outstanding during a period. The diluted loss per share calculation gives effect to dilutive options, warrants, convertible notes, convertible preferred stock, and other potential dilutive common stock including selected restricted shares of common stock outstanding during the period. Diluted loss per share is based on the treasury stock method and includes the effect from potential issuance of common stock, such as shares issuable pursuant to the exercise of stock options, assuming the exercise of all in-the-money stock options. Common share equivalents have been excluded where their inclusion would be anti-dilutive.

	For the Twelve Months Ended December 31, (Restated)		
($ in thousands except share and per share data)	**2013**	**2012**	**2011**
Loss per share Basic:			
Numerator for basic loss per share	$ (31,554)	$ (12,711)	$ (24,043)
Denominator for basic loss per share	29,830,207	8,965,098	2,194,301
Basic loss per common share	$ (1.06)	$ (1.42)	$ (10.96)
Loss per share Diluted:			
Numerator for basic loss per share	$ (31,554)	$ (12,711)	$ (24,043)
Adjust: Fair value of dilutive warrants outstanding		11,091	
Plus: Interest expense, net of tax, on convertible notes	2,267		687
Numerator for diluted loss per share	$ (33,821)	$ (23,802)	$ (24,730)
Denominator for basic loss per share	29,830,207	8,965,098	2,194,301
Plus: Incremental shares underlying in the money warrants outstanding	366,008	181,962	46,673
Denominator for diluted loss per share	30,196,215	9,147,060	2,240,974
Diluted loss per common share	$ (1.12)	$ (2.60)	$ (11.04)

The following potentially dilutive securities have been excluded from the computations of diluted weighted-average shares outstanding, as their effect would be anti-dilutive:

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	For the Twelve Months Ended December 31, (Restated)		
	2013	2012	2011
Shares underlying out of the money options outstanding	2,068,720	562,025	544,340
Shares underlying out of the money warrants outstanding	4,831,352	4,845,352	1,965,424
Shares underlying in the money warrants outstanding	1,320	1,320	180,370
Shares underlying convertible preferred stock			291,280

($ in thousands except share and per share data) (unaudited)	For the Nine Months Ended September 30, (Restated) 2013	2012	2011
Loss per share Basic:			
Numerator for basic loss per share	$ (25,812)	$ 913	$ (21,094)
Denominator for basic loss per share	26,543,099	3,887,530	2,048,779
Basic loss per common share	$ (0.97)	$ 0.23	$ (10.30)
Loss per share Diluted:			
Numerator for basic loss per share	$ (25,812)	$ 913	$ (21,094)
Adjust: Fair value of dilutive warrants outstanding	2,202	10,575	
Plus: Interest expense, net of tax, on convertible notes			47
Numerator for diluted loss per share	$ (28,014)	$ (9,662)	$ 21,141
Denominator for basic loss per share	26,543,099	3,887,530	2,048,779
Plus: Incremental shares underlying preferred stock conversions		730,800	
Plus: Incremental shares underlying in the money warrants outstanding		59,333	4,070
Plus: Incremental shares underlying convertible notes	353,169	184,587	
Denominator for diluted loss per share	26,896,268	4,862,249	2,052,849
Diluted loss per common share	$ (1.04)	$ (1.99)	$ (10.30)

The following potentially dilutive securities have been excluded from the computations of diluted weighted-average shares outstanding, as their effect would be anti-dilutive:

(unaudited)	For the Nine Months Ended September 30, (Restated) 2013	2012	2011
Shares underlying out of the money options outstanding	1,269,320	546,490	546,200
Shares underlying out of the money warrants outstanding	4,831,352	5,466,470	585,841
Shares underlying in the money warrants outstanding			1,313,025
Shares underlying convertible preferred stock			307,280
Shares underlying convertible notes		553,760	

($ in thousands except share and per share data) (unaudited)	For the Six Months Ended June 30, (Restated) 2013	2012
Loss per share Basic:		
Numerator for basic loss per share	$ (19,207)	$ (7,701)
Denominator for basic loss per share	26,230,358	3,852,297
Basic loss per common share	$ (0.73)	$ (2.00)
Loss per share Diluted:		
Numerator for basic loss per share	$ (19,207)	$ (7,701)
Adjust: Fair value of dilutive warrants outstanding	315	10,575

Numerator for diluted loss per share	$	(19,522)	$	(18,276)
Denominator for basic loss per share		26,230,358		3,852,297
Plus: Incremental shares underlying in the money warrants outstanding		207,459		88,999
Denominator for diluted loss per share		26,437,817		3,941,296
Diluted loss per common share	$	(0.74)	$	(4.64)

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The following potentially dilutive securities have been excluded from the computations of diluted weighted-average shares outstanding, as their effect would be anti-dilutive:

	For the Six Months Ended June 30, (Restated)	
(unaudited)	**2013**	**2012**
Shares underlying out of the money options outstanding	744,007	563,390
Shares underlying out of the money warrants outstanding	4,831,352	2,670,275
Shares underlying in the money warrants outstanding	1,320	
Shares underlying convertible preferred stock		1,792,320
Shares underlying convertible notes		569,447

	For the Three Months Ended, (Restated)			
($ in thousands except share and per share data) (unaudited)	**March 31, 2013**	**June 30, 2013**	**September 30, 2013**	**December 31, 2013**
Income (loss) per share Basic:				
Numerator for basic income (loss) per share	$ (4,570)	$ (14,637)	$ (6,605)	$ (5,741)
Denominator for basic income (loss) per share	29,229,909	23,260,802	27,158,394	39,584,342
Basic income (loss) per common share	$ (0.17)	$ (0.63)	$ (0.24)	$ (0.15)
Income (loss) per share Diluted:				
Numerator for basic income (loss) per share	$ (4,570)	$ (14,637)	$ (6,605)	$ (5,741)
Adjust: Fair value of dilutive warrants outstanding	315		1,887	68
Numerator for diluted income (loss) per share	$ (4,885)	$ (14,637)	$ (8,492)	$ (5,809)
Denominator for basic income (loss) per share	26,229,909	23,260,802	27,158,394	39,584,342
Plus: Incremental shares underlying in the money warrants outstanding	415,345		644,163	400,393
Denominator for diluted income (loss) per share	26,645,254	23,260,802	27,802,557	39,984,735
Diluted income (loss) per common share	$ (0.18)	$ (0.63)	$ (0.31)	$ (0.15)

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The following potentially dilutive securities have been excluded from the computations of diluted weighted-average shares outstanding, as their effect would be anti-dilutive:

	For the Three Months Ended, (Restated)			
(unaudited)	**March 31, 2013**	**June 30, 2013**	**September 30, 2013**	**December 31, 2013**
Shares underlying out of the money options outstanding	592,340	744,007	1,269,320	2,068,720
Shares underlying out of the money warrants outstanding	4,845,352	4,831,352	4,831,352	4,831,352
Shares underlying in the money warrants outstanding		1,276,698		60,000

	For the Three Months Ended, (Restated)			
($ in thousands except share and per share data) (unaudited)	**March 31, 2012**	**June 30, 2012**	**September 30, 2012**	**December 31, 2012**
Income (loss) per share Basic:				
Numerator for basic income (loss) per share	$ 3,408	$ (11,109)	$ 8,614	$ (13,624)
Denominator for basic income (loss) per share	3,832,669	3,871,925	3,957,231	24,087,417
Basic income (loss) per common share	$ 0.89	$ (2.87)	$ 2.18	$ (0.57)
Income (loss) per share Diluted:				
Numerator for basic income (loss) per share	$ 3,408	$ (11,109)	$ 8,614	$ (13,624)
Adjust: Fair value of dilutive warrants outstanding		10,575		516
Plus: Interest expense, net of tax, on convertible notes			(70)	
Numerator for diluted income (loss) per share	$ 3,408	$ (21,684)	$ 8,684	$ (14,140)
Denominator for basic income (loss) per share	3,832,669	3,871,925	3,957,231	24,087,417
Plus: Incremental shares underlying in the money warrants outstanding		177,998		549,850
Plus: Preferred stock conversions	275,280		1,917,120	
Plus: Convertible notes			553,760	
Denominator for diluted income (loss) per share	4,107,949	4,049,923	6,428,111	24,637,267
Diluted income (loss) per common share	$ 0.83	$ (5.35)	$ 1.35	$ (0.57)

The following potentially dilutive securities have been excluded from the computations of diluted weighted-average shares outstanding, as their effect would be anti-dilutive:

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(unaudited)	For the Three Months Ended, (Restated) March 31, 2012	June 30, 2012	September 30, 2012	December 31, 2012
Shares underlying out of the money options outstanding	564,555	563,390	546,490	562,025
Shares underlying out of the money warrants outstanding	1,965,424	2,670,275	5,466,470	4,845,352
Shares underlying in the money warrants outstanding				41,120
Shares underlying convertible preferred stock		1,792,320		
Shares underlying convertible notes		569,447		

($ in thousands except share and per share data) (unaudited)	For the Three Months Ended (Restated) September 30, 2011	December 31, 2011
Income (loss) per share Basic:		
Numerator for basic income (loss) per share	$ 6,090	$ (2,949)
Denominator for basic income (loss) per share	2,794,544	3,821,165
Basic income (loss) per common share	$ 2.18	$ (0.77)
Income (loss) per share Diluted:		
Numerator for basic income (loss) per share	$ 6,090	$ (2,949)
Adjust: Fair value of dilutive warrants outstanding	750	
Numerator for diluted income (loss) per share	$ 5,340	$ (2,949)
Denominator for basic income (loss) per share	2,794,544	3,821,165
Plus: Incremental shares underlying in the money warrants outstanding	249,390	
Plus: Preferred stock conversions	307,280	
Denominator for diluted income (loss) per share	3,351,214	3,821,165
Diluted income (loss) per common share	$ 1.59	$ (0.77)

The following potentially dilutive securities have been excluded from the computations of diluted weighted-average shares outstanding, as their effect would be anti-dilutive:

(unaudited)	For the Three Months Ended (Restated) September 30, 2011	December 31, 2011
Shares underlying out of the money options outstanding	546,200	544,340
Shares underlying out of the money warrants outstanding	585,841	1,965,424
Shares underlying convertible preferred stock		291,280

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Fair Value of Financial Instruments

The carrying values of certain of the Company s financial instruments, including cash equivalents and accounts payable approximates fair value due to their short maturities. The fair values of the Company s long term obligations are based on assumptions concerning the amount and timing of estimated future cash flows and assumed discount rates reflecting varying degrees of risk. The carrying values of the Company s long term obligations approximate their fair values.

Note 5. Inventory

Inventories consisted of the following as of:

($ in thousands)	December 31, 2013	December 31, 2012
Raw materials	$ 511	$ 326
Work-in-process	86	151
Inventory	$ 597	$ 477

There was no inventory value at December 31, 2011 as the product was still in the development stage and all costs were attributable to research and development.

Note 6. Property and Equipment

Property and equipment consisted of the following as of:

($ in thousands)	December 31, 2013	December 31, 2012	December 31, 2011
Laboratory equipment	$ 1,045	$ 800	$ 402
Computer equipment and software	179	178	137
Furniture and fixtures	15	15	
Leasehold improvements	448	338	299
Construction-in-process	749	761	762
	2,436	2,092	1,600
Less: Accumulated depreciation	(735)	(434)	(166)
Property and equipment, net	$ 1,701	$ 1,658	$ 1,434

Depreciation expense was approximately $0.3 million, $0.3 million and $0.2 million for the years ended December 31, 2013, 2012 and 2011, respectively.

Note 7. Accrued Expenses

Accrued expenses consisted of the following as of:

($ in thousands)	December 31, 2013	December 31, 2012	December 31, 2011
Accrued professional fees	$ 194	$ 58	$ 702
Accrued compensation	40	48	
Dividend on preferred stock payable			56
Accrued other	253	388	160
Accrued expenses	$ 487	$ 494	$ 918

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Note 8. Warrants

The Company accounts for stock warrants as either equity instruments or derivative liabilities depending on the specific terms of the warrant agreement. Stock warrants are accounted for as a derivative in accordance with Accounting Standards Codification 815, *Derivatives and Hedging* (ASC 815) if the stock warrants contain down-round protection or other terms that could potentially require net cash settlement and therefore, do not meet the scope exception for treatment as a derivative. Since down-round protection is not an input into the calculation of the fair value of the warrants, the warrants cannot be considered indexed to the Company s own stock which is a requirement for the scope exception as outlined under ASC 815. Warrant instruments that could potentially require net cash settlement in the absence of express language precluding such settlement and those which include down-round provisions are initially classified as derivative liabilities at their estimated fair values, regardless of the likelihood that such instruments will ever be settled in cash. The Company will continue to classify the fair value of the warrants that contain down-round protection and net cash settlement as a liability until the warrants are exercised, expire or are amended in a way that would no longer require these warrants to be classified as a liability.

The following table summarizes outstanding liability classified warrants to purchase common stock as of:

December 31, 2013	Number of Warrants		Exercise Price	Expiration Dates
Issued in March 2010 financing	393,416	$	6.25	Mar 2016
Issued in Series A, B and D Preferred Stock offering	2,247,118	$	6.25	Oct 2015-Dec 2016
Issued in Series B, D and E Preferred Stock offerings	76,120	$	2.50	Nov 2015-Sept 2017
Issued in June 2011 financing	6,113	$	22.50	Jun 2016
Issued in August 2011 financing	565,759	$	18.75	Aug 2016
Issued to placement agents in August 2011 financing	50,123	$	13.635	Aug 2016
Issued in Series E Preferred Stock offering	1,568,823	$	7.50	Sept 2018
Issued with Convertible Notes	1,125,578	$	2.50	Jun 2018
Total	6,033,050			

There were 85,000 warrants exercised on a cashless basis for the year ended December 31, 2013, which resulted in the issuance of 46,837 shares of common stock for the year ended December 31, 2013.

December 31, 2012	Number of Warrants		Exercise Price	Expiration Dates
Issued in March 2010 financing	393,416	$	6.25	Mar 2016
Issued in Series A, B and D Preferred Stock offerings	2,247,118	$	6.25	Oct 2015-Dec 2016
Issued in Series B, D and E Preferred Stock offerings	161,120	$	2.50	Nov 2015-Sep 2017
Issued in June 2011 financing	6,113	$	22.50	Jun 2016
Issued in August 2011 financing	579,759	$	18.75	Aug 2016
Issued to placement agents in August 2011 financing	50,123	$	13.635	Aug 2016
Issued in Series E Preferred Stock offering	1,568,823	$	7.50	Sept 2018
Issued with Convertible Notes	1,125,578	$	2.50	Jun 2018
Total	6,132,050			

There were 5,000 warrants exercised on a cashless basis for the year ended December 31, 2012, which resulted in the issuance of 2,496 shares of common stock for the year ended December 31, 2012. In addition there were 14,000 warrant cancellations for the year ended December 31, 2012.

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December 31, 2011	Number of Warrants		Exercise Price	Expiration Dates
Issued in March 2010 financing	196,704	$	12.50	Mar 2015
Issued in Series A, B and D Preferred Stock offerings	1,132,769	$	12.50	Oct 2014-Dec 2015
Issued in June 2011 financing	6,113	$	22.50	Jun 2016
Issued in August 2011 financing	579,732	$	18.75	Aug 2016
Issued to placement agents in August 2011 financing	50,123	$	13.635	Aug 2016
Total	1,965,441			

There were 193,492 warrants exercised for the year ended December 31, 2011 which resulted in receipts of approximately $2.4 million and the issuance of 193,492 shares of common stock. In addition, there were 255,490 cashless warrants exercised for the year ended December 31, 2011 which resulted in the issuance of 142,919 shares of common stock for the year ended December 31, 2011.

Modification of Outstanding Warrants

Pursuant to the October 5, 2012 Debt Agreement, the Company and the Note holders agreed to modify the warrants to purchase an aggregate of 562,788 shares of Common Stock previously issued in connection with the issuance of the Notes (the Debt Warrants): (a) to change the exercise price of the Debt Warrants from $7.50 to $2.50 per share; (b) to increase the number of shares of Common Stock underlying the Debt Warrants by two times the current number of shares rather than three times the current number; (c) to extend the expiration date of the Debt Warrants by one year to June 1, 2018; and (d) to delete the full-ratchet anti-dilution adjustment provisions contained in the Debt Warrants.

In addition, the Note holders agreed, among other items, to modify the warrants to purchase an aggregate of 310,836 shares of Common Stock previously issued to the Note holders (and their affiliates) in prior financings (the Prior Warrants): (a) to extend the expiration date of the Prior Warrants by one year; and (b) to delete the full-ratchet anti-dilution adjustment provisions contained in the Prior Warrants (including with respect to the Offering discussed above).

Effective upon the completion of the October 2012 Offering, the Company entered into warrant modification agreements with the holders of warrants to purchase 4,209,357 shares of common stock at exercise prices between $6.25 per share and $7.50 per share pursuant to which the parties agreed, among other items: (a) to extend the expiration date of the warrants by one year; and (b) to delete the full-ratchet anti-dilution adjustment provisions contained in the warrants (including with respect to the October 2012 Offering discussed above). As such, the exercise price and number of shares underlying the foregoing warrants were not modified due to the completion of the October 2012 Offering.

Liability-classified Warrants

The foregoing warrants are recorded as liabilities at their estimated fair value at the date of issuance, with the subsequent changes in estimated fair value recorded in other income (expense) in the Company s statement of operations in each subsequent period. The change in the estimated fair value of our warrant liability for the years ended December 31, 2013, 2012 and 2011 resulted in non-cash expense of approximately $1.1 million, non-cash income of approximately $20.4 million and non-cash income of $4.5 million, respectively. The Company utilizes the Monte Carlo simulation valuation method to value the liability classified warrants.

The estimated fair value of these warrants is determined using Level 3 inputs. Inherent in the Monte Carlo valuation model are assumptions related to expected stock-price volatility, expected life, risk-free interest rate and dividend yield. The Company estimates the volatility of its common stock based on historical volatility that matches the expected remaining life of the warrants. The risk-free interest rate is based on the U.S. Treasury zero-coupon yield curve on the grant date for a maturity similar to the expected remaining life of the warrants. The expected life of the warrants is assumed to be equivalent to their remaining contractual term. The dividend rate is based on the historical rate, which the Company anticipates to remain at zero.

A portion of the warrant holders didn t sign the waivers to remove the down-round protection in October 2012 and, consequently, the liability-classified warrants exercise price was reset to $2.50 per share and additional warrants were issued.

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The following table summarizes the calculated aggregate fair values, along with the assumptions utilized in each calculation:

($ in thousands, except per share data)	December 31, 2013	December 31, 2012	December 31, 2011
Calculated aggregate value	$ 15,216	$ 14,515	$ 23,754
Weighted average exercise price per share of warrant	$ 7.08	$ 7.04	$ 14.40
Closing price per share of common stock	$ 4.06	$ 3.75	$ 10.00
Volatility	70%	65%	80%
Weighted average remaining expected life (years)	3.5	4.5	4.0
Risk-free interest rate	1.2%	0.6%	0.5%
Dividend yield			

Note 9. Debt

Convertible Note Payable

On June 1, 2012, the Company entered into an exchange agreement with existing note holders pursuant to which the Company agreed to repay half of each holder s 12.5% promissory notes due June 1, 2012 and exchange the balance of each holder s original note, for (i) a new 12.5% note (Note) with a principal amount equal to such balance, and (ii) a five-year warrant (Warrant) to purchase a number of shares of common stock equal to the number of shares of common stock underlying such note on the date of issuance. Details of Notes are as follows:

- The Notes accrued interest at a rate of 12.5% per annum payable quarterly in cash or, at the Company s option, 15% per annum payable in kind by capitalizing such unpaid amount and adding it to the principal as of the date it was due.

- The maturity date of the Notes was September 1, 2013, provided that the Holders may require the Company to redeem 25% of the principal amount of the Notes on each of December 1, 2012, March 1, 2013, June 1, 2013 and September 1, 2013.

- To the extent that Holders of the Notes converted any portion of the Notes prior to any such redemption date, the amount of all future redemption payments will be reduced by such converted amount on a *pro rata* basis over the remaining redemption dates.

- The Notes were convertible at a conversion price of $6.25 per share, provided that, with certain exceptions, if, at any time while the Notes are outstanding, the Company issues any Company common stock or common stock equivalents at an effective price per share that is lower than the then the conversion price of the Notes, then the conversion price of the Notes will be reduced to equal the lower price.

- The Notes may be accelerated if any events of default occur, which include, in addition to certain customary default provisions, if at any time on or after October 1, 2012 the Company fails to have reserved, for conversion of the Notes and exercise of the Warrants, a sufficient number of available authorized but unissued shares of common stock.

The Notes were converted at a conversion price of $6.25 per share. To the extent that holders of the Notes converted any portion of the Notes prior to any such redemption date, the amount of all future redemption payments was reduced by such converted amount on a *pro rata* basis over the remaining redemption dates. The Notes were extinguished in October 2012 through partial conversions into common stock and partial repayments in cash. For additional discussion on conversion of notes payable, see Note 9.

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The Company s outstanding debt at December 31, 2011 consisted of $6.7 million of 12.5% Unsecured Promissory Notes (Notes). Unpaid interest has been accreted to the principal at a rate of 15%. The Notes have the following features: (1) 12.5% interest payable quarterly in cash or, at the Company s option, 15% payable in kind by capitalizing such unpaid amount and adding it to the principal as of the date it was due; (2) maturing June 1, 2012; (3) at any time prior to the maturity date, the Company may redeem any portion of the outstanding principal of the Notes in cash at 125% of the stated face value of the Notes. There is a mandatory redemption feature that requires the Company to redeem all outstanding Notes if: (1) the Company successfully completes a capital campaign raising in excess of $10 million; or (2) the Company is acquired by, or sells a majority stake to, an outside party.

Since the Company consummated a single offering of at least $10 million in August 2011, certain note holders were entitled to a mandatory redemption of the outstanding principal plus any interest payable in cash within three business days of the consummation. Approximately $1.7 million including interest was paid in 2011 after consummation of the offering. The remaining note holders signed amendments to their notes raising the mandatory redemption for a single offering or a series of offerings within a six-month period from $10 million to $30 million. The Note was due June 2012.

Loss on Extinguishment of Debt

As a result of the June 1, 2012 debt exchange as discussed above, the Company recorded a loss on extinguishment of the 12.5% promissory note of $5.6 million in the consolidated statement of operations for the year ended December 31, 2012 due to the significant modification of the original debt. The details of the loss included recording the fair value of the embedded conversion option of $1.2 million and the fair value of liability-classified warrants of $4.4 million. See Note 8 for further discussion of the warrant liability.

Note 10. Equity

Common stock

In October of 2012, the Company closed a private placement transaction (the Offering) with certain accredited investors pursuant to which the Company sold securities consisting of 18,000,000 shares of common stock at a purchase price of $2.50 per share. An additional 203,000 shares were given to placement agents in connection with the Offering. The Company received net proceeds of $40.2 million, incurred $2.7 million in offering costs and had a subscription receivable of $2.0 million which was subsequently collected in July of 2013.

In connection with the execution of the exclusive channel collaboration (the Channel Agreement) on October 5, 2012, the Company entered into a Stock Issuance Agreement with Intrexon, who is an affiliate of NRM VII Holdings I, LLC, the Company s largest shareholder. The Company agreed to issue to Intrexon a number of shares of Company common stock based on a per share value of the price at which the Company sold shares of common stock in the Offering (the Technology Access Shares). The closing took place on October 9, 2012. The Company recorded a fair value of $6.9 million for 1,317,520 shares, on a per share value of $5.25 based on the closing price of the Company s common stock on the closing date, issued to Intrexon for the closing of the Stock Issuance Agreement as a research and development expense in the fourth quarter of 2012. In connection with the issuance of the Technology Access Shares, Intrexon became a party to a Registration Rights Agreement, which provides Intrexon with a demand registration right with respect to the resale of the Technology Access Shares. See Note 14 for further discussion on the collaboration with Intrexon.

On October 5, 2012, the Company entered into an amendment and conversion agreement (the Debt Agreement) with the holders of its 12.5% Convertible Notes in the aggregate original principal amount of approximately $3.5 million (the Notes). Pursuant to the Debt Agreement, the Company and the Note holders agreed that the Company would repay approximately $1.7 million of the Notes in cash (representing approximately $1.5 million in principal and $0.2 million in unpaid interest), and the remaining Notes (representing approximately $2.1 million in principal and $0.3 million in unpaid interest) would be converted into shares of common stock at a conversion price of $2.50 per share. The total number of shares of common stock issued upon the conversion of the Notes was 861,970 shares. There were conversions of notes into 36,671 common shares before the October 2012 offering.

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Effective upon the completion of the Offering, the Company entered into warrant modification agreements with the holders of warrants to purchase 4,209,357 shares of common stock at exercise prices of between $6.25 per share and $7.50 per share pursuant to which the parties agreed, among other items: (a) to extend the expiration date of the warrants by one year; and (b) to delete the full-ratchet anti-dilution adjustment provisions contained in the warrants (including with respect to the Offering discussed above). As such, the exercise price and number of shares underlying the foregoing warrants were not modified due to the completion of the Offering.

In connection with the execution of the first amendment to the exclusive channel collaboration agreement (the First Amendment) on June 28, 2013, the Company entered into a Supplemental Stock Issuance Agreement with Intrexon. The Company agreed to issue to Intrexon a number of shares of Company common stock based on a per share value of the closing price of the Company s common stock on the NYSE MKT on the day prior to execution of the Supplemental Stock Issuance Agreement (the Supplemental Access Fee Shares). The Supplemental Access Fee Shares were issued upon the satisfaction of customary closing conditions, including the approval for the listing of the Supplemental Access Fee Shares on the NYSE MKT. The closing took place on July 26, 2013. The Company recorded a fair value of $6.4 million for 1,243,781 shares, on a per share value of $5.15 based on the closing price of the Company s common stock on the closing date, issued to Intrexon for the closing of the Supplemental Stock Issuance Agreement as a research and development expense in the third quarter of 2013. See Note 14 for further discussion on the collaboration with Intrexon.

In October of 2013, the Company completed an underwritten public offering of 11,000,000 shares of common stock at a public offering price of $4.10 per share. The net proceeds to the Company, after underwriting discounts and commissions and estimated offering expenses, were approximately $42.1 million. The underwriters for the public offering of common stock partially exercised their over-allotment option to purchase an additional 1,311,698 shares of common stock at a public offering price of $4.10 per share. The partial exercise of the over-allotment option increased the aggregate net proceeds to the company, after underwriting discounts and commissions and estimated offering expenses, from approximately $42.1 million to approximately $47.1 million.

Common Stock Private Placements

On August 3, 2011, the Company entered into agreements with certain accredited investors, pursuant to which the Company agreed to sell to the purchasers an aggregate of 1,656,379 shares of Company common stock at a purchase price of $13.75 per share in a private placement. Each purchaser also received a warrant to purchase 0.35 shares of common stock for every share of common stock acquired in the offering with an exercise price of $18.75 per share and a term of 5 years from issuance. The warrants are callable by the Company if the common stock trades over $43.75 for 20 consecutive trading days at any time after the shares underlying the warrants are registered or eligible for resale pursuant to Rule 144. The aggregate purchase price paid by the purchasers at closing for the common stock and the warrants was $22.8 million. As of December 31, 2011, there was a subscription receivable of $0.6 million. The placement agents for the transaction received cash compensation of $1.6 million and warrants to purchase 50,111 shares of Company common stock at an exercise price of $13.635 and fair value of $440,330. Cash issuance costs of $1.6 million were netted against the gross proceeds.

On June 16, 2011, the Company completed a private placement, pursuant to which it sold an aggregate of 76,356 shares of Company common stock to eight accredited investors for an aggregate purchase price of $1,718,000. The placement agent for the transaction received cash compensation of $137,440 and warrants to purchase 6,109 shares of Company common stock at an exercise price of $22.50 per share.

Preferred Stock

The Company is authorized to issue 5,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges, and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of common stock. The issuance of the Company s preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change of control of the Company or other corporate action.

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Redeemable Preferred stock

On October 5, 2012, upon the approval of the requisite number of holders of the Company s Series D 6% Cumulative Perpetual Convertible Preferred Stock (the Series D Preferred Stock) and Series E 8% Cumulative Convertible Preferred Stock (the Series E Preferred Stock), the Company filed amendments, effective on such date, to each of the Certificates of Designation for the Preferred Stock providing that if the Company completed an equity financing pursuant to which the Company received gross proceeds of no less than $35.0 million (a Qualified Financing), then immediately prior to the closing of such Qualified Financing each outstanding share of preferred stock shall be automatically converted into that number of shares of common stock determined by dividing the stated value of such share of Series D and Series E preferred stock by $6.25. The Offering discussed above was a Qualified Financing, and as such, the Series D and E preferred stock was automatically converted into 1,917,120 shares of common stock upon completion of the Offering, 454,560 of which were Series D and 1,462,560 of which were Series E. There were 104,000 common shares issued as a result of conversion of Series D preferred shares during 2012 before the automatic conversion of the preferred shares pursuant to the Offering. As of the closing of the Offering, the Company had no shares of preferred stock outstanding

The following table shows the activity of Series D and Series E Redeemable Preferred stock, with a par value of $0.001 per share and a stated value of $25,000 per share:

	Series D Preferred	Series E Preferred	Total
Balance at December 31, 2011	3,641		3,641
Issuance of Series E Preferred stock		9,141	9,141
Series D and Series E Preferred converted to common stock	(3,641)	(9,141)	(12,782)
Balance at December 31, 2012			

During May, June and July 2012 the Company sold to accredited investors in a private placement Series E Convertible Preferred Stock as follows:

Date of financing	# of shares of Series E Preferred	Net Proceeds ($ in 000 s)	Warrant Exercise Price	# of Warrants Issued
May 14, 2012	3,353	$ 2,843	$ 7.50	590,128
May 24, 2012	2,364	2,042	7.50	416,064
June 2, 2012	945	822	7.50	166,320
June 7, 2012	1,192	1,037	7.50	209,792
June 28, 2012	507	441	7.50	89,232
July 16, 2012	780	679	7.50	137,280
	9,141	$ 7,864		1,608,816

As a result of the May, June and July 2012 private placement Series E Convertible Preferred Stock transaction, the net proceeds of $7.8 million were allocated to the fair value of the warrants upon issuance. The July 16, 2012 sale represented the final closing of the Offering and effective on such date, the Company closed the Offering.

Preferred Stock Series D

On January 21, 2011, the Company completed a private placement of securities in which the Company sold to certain accredited investors in the aggregate: (i) 50 shares of Series D Convertible Preferred Stock, with a par value of $0.001 per share and a stated value of $25,000 per share, and (ii) warrants to purchase 98,720 shares of

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Company common stock at an exercise price of $12.50 per share. The aggregate purchase price paid by the Purchasers for the Series D Preferred and the Warrants was $1,234,000 (representing $25,000 for each share of Series D Preferred together with warrants). The Company used the proceeds for working capital purposes. The placement agents for the offering received cash compensation of $98,720 and warrants to purchase 7,898 shares of Common Stock at an exercise price of $12.50 per share.

On January 28, 2011, the Company completed a private placement of securities in which the Company sold to certain accredited investors in the aggregate: (i) 57 shares of Series D at a stated value of $25,000 per share, and (ii) warrants to purchase 113,120 shares of Common Stock at an exercise price of $12.50 per share. The aggregate purchase price paid by the Purchasers for the Series D Preferred and the warrants was $1,414,000 (representing $25,000 for each share of Series D Preferred together with warrants). The Company used the proceeds for working capital purposes. The placement agents for the offering received cash compensation of $113,120 and warrants to purchase 9,050 shares of Common Stock at an exercise price of $12.50 per share.

On February 9, 2011, the Company completed a private placement of securities in which the Company sold to certain accredited investors in the aggregate: (i) 138 shares of Series D at a stated value of $25,000 per share, and (ii) warrants to purchase 274,880 shares of Common Stock at an exercise price of $12.50 per share. The aggregate purchase price paid by the Purchasers for the Series D Preferred and the warrants was $3,436,000 (representing $25,000 for each share of Series D Preferred together with warrants). The Company used the proceeds for working capital purposes. The placement agents for the offering received cash compensation of $274,880 and warrants to purchase 21,991 shares of Common Stock at an exercise price of $12.50 per share.

On March 1, 2011, the Company completed a private placement of securities in which the Company sold to certain accredited investors in the aggregate: (i) 2 shares of Series D at a stated value of $25,000 per share, and (ii) warrants to purchase 4,000 shares of Common Stock at an exercise price of $12.50 per share. The aggregate purchase price paid by the Purchasers for the Series D Preferred and the warrants was $50,000 (representing $25,000 for each share of Series D Preferred together with warrants). The Company intends to use the proceeds for working capital purposes. The placement agents for the offering received cash compensation of $4,000 and warrants to purchase 320 shares of Common Stock at an exercise price of $12.50 per share.

On May 24, 2011, the Company sent a mandatory conversion notice to the holders of its outstanding Series A Convertible Preferred Stock and Series B Convertible Preferred Stock. Pursuant to the notice, each holder of Series A Convertible Preferred Stock and Series B Convertible Preferred Stock was notified that since the volume weighted average price of the Company s common stock had exceeded 200% of the then effective conversion price of the Preferred Stock for twenty consecutive trading days; the Company was permitted to force the conversion of the Preferred Stock into Company common stock. The conversion was effective on July 7, 2011; provided that holders of Preferred Stock had the right to voluntarily convert their shares of Preferred Stock prior to such date. During 2011, 116 Series A preferred shares were converted into 230,880 common shares. During 2011, 186 Series B preferred shares were converted into 371,200 common shares.

The Company recorded accrued dividends at a rate of 6% per annum on the Series D and 8% per annum on the Series E Preferred. The Company paid cash of $0.5 million and $0.6 million during the years ended December 31, 2012 and 2011, respectively. There were no cash dividends paid during the year ended December 31, 2013 as the Series D and Series E Redeemable Preferred stock were converted into common stock in October 2012. During 2011, 166 Series D preferred shares were converted into 331,040 common shares.

Conversion option of Convertible Note Payable

In connection with the issuance of the June 1, 2012 Convertible Notes, an embedded conversion option was recorded as a derivative liability under ASC 815, *Derivatives and Hedging*, in the 2012 consolidated balance sheet until October 2012 when the notes were converted to common stock. The derivative liability was re-measured on the Company s reporting dates until October 9, 2012 when the Notes were converted into common stock resulting in revaluation expense of less than $0.1 million for the year ended December 31, 2012 in our statement of operations. The fair value of the derivative liability was determined using the Black-Scholes option-pricing model and is affected by changes in inputs to that model including our stock price, expected stock price volatility, the contractual term, and the risk-free interest rate. The convertible notes were reclassified to equity which amounted to $2.4 million.

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Conversion option of Redeemable Preferred stock

The embedded conversion option for the Series D Preferred has been recorded as a derivative liability under ASC 815 in the consolidated balance sheet as of December 31, 2011. The fair value of the derivative liability is determined using the Black-Scholes option-pricing model and is affected by changes in inputs to that model including the Company s stock price, expected stock price volatility, the contractual term, and the risk-free interest rate. The derivative liability was re-measured resulting in income of $0.1 million for the year ended December 31, 2012 in the Company s Consolidated Statement of Operations until the preferred stock was converted on October 9, 2012 into common stock and $1.4 million was recorded in equity.

The fair market value of the derivative liability was computed using the Black-Scholes option-pricing model with the following weighted average assumptions as of the dates indicated:

	December 31, 2011
Expected life (years)	1.1 years
Interest rate	0.1%
Dividend yield	
Volatility	61%

Note 11. Fair Value Measurements

The Company adopted the accounting guidance on fair value measurements for financial assets and liabilities measured on a recurring basis. The guidance requires fair value measurements be classified and disclosed in one of the following three categories:

- Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;

- Level 2: Quoted prices in markets that are not active or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability;

- Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

The following fair value hierarchy table presents information about each major category of the Company s financial assets and liability measured at fair value on a recurring basis as of December 31, 2013 and 2012:

($ in thousands)	Quoted prices in active markets (Level 1)	Fair value measurement using Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Balance at December 31, 2013				
Assets:				
Cash and cash equivalents	$ 60,033	$	$	$ 60,033
Liabilities:				
Warrant liability	$	$	$ 15,216	$ 15,216

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($ in thousands)	Quoted prices in active markets (Level 1)	Fair value measurement using Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Balance at December 31, 2012				
Assets:				
Cash and cash equivalents	$ 31,346	$	$	$ 31,346
Liabilities:				
Warrant liability	$	$	$ 14,515	$ 14,515

($ in thousands)	Quoted prices in active markets (Level 1)	Fair value measurement using Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)	Total
Balance at December 31, 2011				
Assets:				
Cash and cash equivalents	$ 10,799	$	$	$ 10,799
Liabilities:				
Warrant liability	$	$	$ 23,754	$ 23,754

The reconciliation of warrant liability measured at fair value on a recurring basis using unobservable inputs (Level 3) is as follows:

($ in thousands)	Warrant Liability
Balance at December 31, 2010	$ 14,585
Issuance of additional warrants	16,856
Exercise of warrants	(5,379)
Change in fair value of warrant liability	(2,308)
Balance at December 31, 2011	$ 23,754
Issuance of additional warrants	6,766
Exercise of warrants	(11)
Extinguishment of debt	4,410
Change in fair value of warrant liability	(20,404)
Balance at December 31, 2012	$ 14,515
Exercise of warrants	(352)
Cancellation of warrants	(41)
Change in fair value of warrant liability	1,094
Balance at December 31, 2013	$ 15,216

The fair value of the warrant liability is based on Level 3 inputs. For this liability, the Company developed its own assumptions that do not have observable inputs or available market data to support the fair value. See Note 8 for further discussion of the warrant liability.

The reconciliation of derivative liability measured at fair value on a recurring basis using unobservable inputs (Level 3) is as follows:

		Derivative Liability
Balance at January 1, 2011	$	2,120
Issuance of additional preferred stock and other		252
Conversion of preferred stock		(7,290)
Change in fair value of derivative liability		5,452
Balance at December 31, 2011		534
Issuance of additional preferred stock and other		793
Conversion of preferred stock		(1,350)
Change in fair value of derivative liability		23
Balance at December 31, 2012	$	

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The fair value of the derivative liability is based on Level 3 inputs. For this liability, the Company developed its own assumptions that do not have observable inputs or available market data to support the fair value. See Note 12 for further discussion of the derivative liability.

Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

On June 1, 2012 the Company issued 12.5% Convertible Notes (Notes) (in exchange for certain outstanding notes), which provided that unpaid interest of 15% be accreted to the principal, and which had a maturity date of June 1, 2013. The Notes were measured at face value including interest in our consolidated balance sheets and not fair value. The Notes approximated fair value on June 1, 2012 as they bore interest at a rate approximating a market interest rate. The Notes were extinguished in October 2012 through partial conversions into common stock and partial repayments in cash.

The Company believes that the fair values of our current assets and current liabilities approximate their reported carrying amounts. There were no transfers between Level 1, 2 and 3.

Note 12. Share-Based Compensation

Our board of directors (the Board) adopted the 2009 Equity Incentive Plan (as amended to date, the Plan) effective September 3, 2009. The Plan is intended to further align the interests of the Company and its stockholders with its employees, including its officers, non-employee directors, consultants and advisors by providing incentives for such persons to exert maximum efforts for the success of the Company. The Plan allows for the issuance of up to 2,600,000 shares of the Company s common stock. In addition, there were 206,000 options issued outside of the Plan to consultants.

The types of awards that may be granted under the Plan include options (both nonqualified stock options and incentive stock options), stock appreciation rights, stock awards, stock units, and other share-based awards. The term of each award is determined by the Board at the time each award is granted, provided that the terms of options may not exceed ten years. Vesting schedules for the stock options vary, but generally vest 25% per year, over four years. The Plan had 713,280 options available for grant as of December 31, 2013.

Total stock-based compensation expense recognized using the straight-line attribution method in the consolidated statement of operations for the years ended December 31 is as follows:

($ in thousands)	2013	2012	2011
Stock option compensation expense for employees and directors	$ 1,045	$ 1,200	$ 2,607
Restricted stock expense			48
Equity awards for nonemployees issued for services	105	24	245
Total stock-based compensation expense	$ 1,150	$ 1,224	$ 2,900

There were 24,000 cashless stock options exercised during the year ended December 31, 2011, which resulted in the issuance of 9,846 shares of common stock. During the years ended December 31, 2013 and 2012, the weighted average fair market value using the Black-Scholes option-pricing model of the options granted was $2.79 and $5.00, respectively.

The fair market value of the stock options at the date of grant was estimated using the Black-Scholes option-pricing model with the following weighted average assumptions for the years ended December 31:

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	2013	2012	2011
Expected life (years)	5.8	5.7	5.4
Interest rate	1.6%	1.6%	2.1%
Dividend yield			
Volatility	71%	64%	62%

	Number of shares	Weighted-average exercise price	Weighted-average remaining contractual term (in years)	Aggregate intrinsic value
Outstanding at December 31, 2010	227,080	$ 21.50	7.5	$
Granted	385,120	$ 18.00		
Exercised	(24,000)	$ 18.75		
Forfeited	(43,860)	$ 19.25		
Outstanding at December 31, 2011	544,340	$ 19.25	7.5	$
Granted	38,000	$ 8.02		
Exercised				
Forfeited	(20,315)	$ 15.48		
Outstanding at December 31, 2012	562,025	$ 18.56	7.0	$
Granted	1,532,000	$ 4.15		
Exercised				
Forfeited	(25,305)	$ 14.71		
Outstanding at December 31, 2013	2,068,720	$ 7.93	8.4	$ 544
Exercisable at December 31, 2013	703,437	$ 15.36	6.9	$ 23

The total fair value of shares vested during the years ended December 31, 2013, 2012 and 2011 were $1.2 million, $1.3 million and $2.5 million, respectively. There were no exercises of vested stock options during the years ended 2013 and 2012. There were 24,000 cashless stock options exercised during the year ended 2011, which resulted in the issuance of 9,846 shares of common stock. As of December 31, 2013, there was $2.8 million of total unrecognized compensation cost, related to nonvested stock options which vest over time. That cost is expected to be recognized over a weighted-average period of 3.4 years. As of December 31, 2013, there was approximately $0.6 million of total unrecognized compensation cost related to performance-based nonvested consultant options.

Note 13. Income Taxes

Fibrocell Science, Inc. and Fibrocell Technologies, Inc. file a consolidated U.S. Federal income tax return, and file U.S. state income tax returns in several jurisdictions as well. In general, the U.S. federal and state income tax returns remain open to examination by taxing authorities for tax years beginning in 2010 to present. However, if and when the Company claims net operating loss carryforwards from years prior to 2010 against future taxable income, those losses may be examined by the taxing authorities as well. The Company s foreign subsidiaries file income tax returns in their respective jurisdictions.

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The components of the income tax expense/(benefit) related to continuing operations, are as follows:

($ in thousands)	Year ended December 31, 2013	Year ended December 31, 2012	Year ended December 31, 2011
U.S. Federal:			
Current	$	$	$
Deferred		(2,068)	
U.S. State:			
Current			
Deferred		(432)	
	$	$ (2,500)	$

The reconciliation between income taxes/ (benefit) at the U.S. federal statutory rate and the amount recorded in the accompanying consolidated financial statements is as follows:

($ in thousands)	Year ended December 31, 2013	Year ended December 31, 2012	Year ended December 31, 2011
Tax benefit at U.S. federal statutory rate	$ (11,044)	$ (5,475)	$ (8,375)
Increase in domestic valuation allowance	11,626	11,127	8,767
State income taxes/(benefit) before valuation allowance, net of federal benefit	(1,026)	(1,971)	(1,367)
Capital loss limitation		(817)	
Loss on extinguishment of debt		1,966	
Derivative revaluation expense		8	1,908
Warrant revaluation and other finance (income)/expense	369	(7,141)	(897)
Other	75	(196)	(36)
	$	$ (2,500)	$

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The components of the Company s net deferred tax assets and liabilities at December 31, 2013 and 2012 are as follows:

($ in thousands)	December 31, 2013	December 31, 2012	December 31, 2011
Deferred tax liabilities:			
Intangible assets	$ 2,247	$ 2,282	$ 2,500
Total deferred tax liabilities	$ 2,247	$ 2,282	$ 2,500
Deferred tax assets:			
Loss carryforwards	$ 54,253	$ 49,598	$ 37,397
Capital loss carryforward	844	817	
Property and equipment	1,149	1,327	1,390
License fees	5,393		
Accrued expenses and other	412	360	294
Stock compensation	2,698	2,492	2,104
Total deferred tax assets	64,749	54,594	41,185
Less: valuation allowance	(62,502)	(52,312)	(41,185)
Total deferred tax assets	$ 2,247	$ 2,282	$
Net deferred tax liabilities	$	$	$ 2,500

As of December 31, 2013, the Company had generated U.S. net operating loss carryforwards of approximately $141.7 million which expire from 2018 to 2033 and net loss carryforwards in certain non-US jurisdictions of approximately $25.5 million. The net operating loss carryforwards are available to reduce future taxable income. However, a, change in ownership, as defined by federal income tax regulations, could significantly limit the Company s ability to utilize its U.S. net operating loss carryforwards. Additionally, because federal tax laws limit the time during which the net operating loss carryforwards may be applied against future taxes, if the Company fails to generate taxable income prior to the expiration dates it may not be able to fully utilize the net operating loss carryforwards to reduce future income taxes. As the Company has had cumulative losses and there is no assurance of future taxable income, valuation allowances have been recorded to fully offset the deferred tax asset at December 31, 2013, 2012, and 2011. The valuation allowance increased by $10.2 million, $11.1 million, and $8.8 million during 2013, 2012, and 2011, respectively, primarily due to the impact from the current year net losses incurred.

Note 14. Collaboration with Related Party

Intrexon is an affiliate of our largest shareholder, NRM VII Holdings I, LLC. In addition, two of our seven directors are also affiliates of NRM VII Holdings I, LLC.

On October 5, 2012, the Company entered into an Exclusive Channel Collaboration Agreement (the Channel Agreement) with Intrexon that governs a channel collaboration arrangement. The Channel Agreement grants the Company an exclusive license to use proprietary technologies and other intellectual property of Intrexon

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to develop and commercialize certain products in the United States. Through the original collaboration with Intrexon, the Company is exploring the use of genetically-modified fibroblast cells to treat patients with collagen deficient diseases. The Company is working to genetically modify fibroblasts with the gene to produce collagen VII to treat patients with recessive dystrophic epidermolysis bullosa (RDEB). This development concept utilizes genetically-modified fibroblasts to up-regulate and produce collagen VII in a controlled manner for localized or systematic treatment of RDEB.

In connection with the execution of the Channel Agreement on October 5, 2012, the Company entered into a Stock Issuance Agreement with Intrexon. In connection with the stock issuance, Intrexon became a party to the Registration Rights Agreement, which provides Intrexon with a demand registration right with respect to the resale of the Technology Access Shares. For additional details see Note 10.

On June 28, 2013, the Company and Intrexon entered into a First Amendment (the Amendment) to the parties Channel Agreement. The Amendment broadens the existing collaboration to include potential treatments based on engineered autologous fibroblast cells for the localized treatment of autoimmune and inflammatory disorders including morphea profunda / linear scleroderma, cutaneous eosinophilias and moderate to severe psoriasis. In connection with the execution of the First amendment to the Channel Agreement on June 28, 2013, the Company entered into a Supplemental Stock Issuance Agreement with Intrexon. For additional details see Note 10.

Pursuant to the Channel Agreement and Amendment, the Company engaged Intrexon for support services for the development of new products covered under the Channel Agreement and Amendment, and will reimburse Intrexon for its fully-loaded cost for time and materials for transgenes, cell processing, or other work performed by Intrexon for such research and manufacturing. For the years ended December 31, 2013 and 2012, the Company incurred expenses of $3.7 million and $0.1 million, respectively, for work performed. As of December 31, 2013 and 2012, the Company had outstanding trade payables with Intrexon of $1.3 million and $0.1 million, respectively. The Company will pay quarterly cash royalties on improved products equal to one-third of cost of goods sold savings less any such savings developed by the Company outside of the Channel Agreement or Amendment. On all other developed products, the Company will pay Intrexon quarterly cash royalties of 7% on aggregate annualized net sales up to $100 million, and 14% on aggregate annualized net sales greater than $100 million. Sales from the Company s products (including new indications) marketed at the time of the Channel Agreement are not subject to royalty payments unless they are improved upon through the Channel Agreement. For additional discussion on Intrexon, see Note 18.

Note 15. Commitments and Contingencies

Leases

On April 6, 2005, the Company entered into a non-cancellable operating lease (the Lease) for its office, warehouse and laboratory facilities in Exton, Pennsylvania. The lease agreement had a term of 8 years. On February 17, 2012, the Company entered into an amended and restated lease (the Amended Lease) for an additional term of 10 years through the year 2023. The Lease and the Amended Lease provide for rent payments escalating on an annual basis. In accordance with ASC 840-20 *Operating Leases*, the Company calculated the total minimum payments under the lease and divided them equally over the life of the lease to account for the lease on a straight-line basis. The Company has the option to renew the lease for an additional 5 years at fair market value. Rental expense totaled $1.5 million, $1.4 million and $1.4 million for the years ended December 31, 2013, 2012 and 2011, respectively.

License Agreements

On May 3, 2012, the Company entered into an exclusive license agreement with The Regents of the University of California, under which the Company acquired the rights to commercially apply discoveries resulting from the scientific collaboration between the University of California, Los Angeles (UCLA) and Fibrocell Science, Inc. Under the terms of the license agreement, the Company agreed to pay UCLA a non-refundable initial license fee of $10,000 thirty days post execution of the agreement and the Company also agreed to pay UCLA an annual license maintenance fee of a percentage of product royalties, and milestone payments based on the Company s achievement of certain clinical and regulatory related milestones for these rights. The Company s

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ability to meet the milestones is dependent on a number of factors including final approvals by regulatory agencies and the continued enforceability of patent claims.

On May 3, 2012, the Company also entered into a sponsored research agreement with the Massachusetts Institute of Technology (MIT) to progress the research currently underway at UCLA above. Under the agreement, MIT researchers will investigate viable techniques to isolate, separate, and expand subpopulations of mesenchymal stem cells from dermal cell populations. The goal is to produce relevant quantities of the cells and performs ex vivo studies to determine the ability of these cells to produce clinically meaningful outcomes, such as bone production. If successful, in vivo studies will be evaluated for safety and efficacy analysis. The agreement is currently scheduled to terminate in September 2015

The amounts in the table below assume the foregoing agreements are continued through their respective terms. The agreements may be terminated at the option of either party. In such event, the Company s obligation would be limited to costs through the date of such termination.

Contractual Obligations

The following table summarizes the Company s contractual obligations as of December 31, 2013:

		Payments due by period			
($ in thousands)	**Total**	**2014**	**2015 and 2016**	**2017 and 2018**	**2019 and thereafter**
License fee obligations**(1)**	$ 895	$ 525	$ 290	$ 40	$ 40
Operating lease obligations**(2)**	$ 12,251	$ 1,081	$ 2,465	$ 2,509	$ 6,196
Total	$ 13,146	$ 1,606	$ 2,755	$ 2,549	$ 6,236

(1) Obligations for license agreement with the University of California, Los Angeles (UCLA) and sponsored research agreement with the Massachusetts Institute of Technology (MIT). The amounts in the table assume the foregoing agreements are continued through their respective terms. The agreements may be terminated at the option of either party. In such event, the Company s obligation would be limited to costs through the date of such termination.

(2) Operating lease obligations are stated based on the amended lease agreement for the office, warehouse and laboratory facilities executed in February 2012.

Note 16. Supplemental Cash Flow Information

The following table contains additional cash flow information as of:

($ in thousands)	December 31, 2013	December 31, 2012	December 31, 2011
Supplemental disclosures of cash flow information:			
Cash paid for interest	$	$ 1,885	$ 435
Non-cash investing and financing activities:			
Subscription receivable	$	$ 2,004	$ 550
Conversion of note payable	$	$ 2,385	$
Issuance of additional warrants	$	$ 11,077	$
Conversion of preferred stock derivative balance into common stock	$	$ 1,350	$ 7,291
Cashless exercise of warrants previously recorded as a liability	$ 298	$ 17	$ 8,926
Warrant liability reclassified to equity	$	$ 15,048	$
Accrued derivative liability	$	$ 793	$ 252
Accrued preferred stock dividend	$	$	$ 487
Conversion of preferred stock Series A balance into common stock	$	$	$ 1,203
Accrued warrant liability	$	$	$ 4,994
Financing of insurance premiums	$	$	$ 150

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Note 17. Discontinued Operations

On August 31, 2012, the Company sold all of the shares of common stock of Agera held by the Company, which represented 57% of the outstanding common stock of Agera, to Rohto Pharmaceutical Co., Ltd. for approximately $1.0 million. Accordingly, all operating results from continuing operations exclude the results for Agera which are presented as discontinued operations for the years ended December 31, 2012 and December 31, 2011. The Company recorded a gain for the year ended December 31, 2012 of approximately $0.4 million on the sale.

The financial results of Agera are classified as discontinued operations in the accompanying Consolidated Statement of Operations for the years ended December 31, 2012 and 2011.

Summary financial information related to discontinued operations is as follows:

($ in thousands)	Year ended December 31, 2012	Year ended December 31, 2011
Product sales	$ 516	$ 812
Cost of sales	275	451
Gross profit	241	361
Operating income (loss)	$ 27	$ (55)
Net loss	$ (2)	$ (73)

In addition, there were other minimal losses from foreign subsidiaries which were classified as discontinued operations for the year ended December 31, 2012.

Note 18. Subsequent Event

On January 10, 2014, the Company and Intrexon entered into a Second Amendment (the Second Amendment) to the parties Exclusive Channel Collaboration Agreement dated October 5, 2012, as previously amended on June 28, 2013 (the Channel Agreement and such previous amendment, the First Amendment). The Channel Agreement provides for a channel collaboration arrangement governing a strategic collaboration for the development and commercialization of genetically-modified and non-genetically-modified autologous fibroblasts and autologous dermal cells in the United States. The Channel Agreement originally granted the Company an exclusive license to use proprietary technologies and other intellectual property of Intrexon to research, develop, use, import, export, make, have made, sell, and offer for sale certain products in the Field in the United States.

In connection with the execution of the Second Amendment to the Channel Agreement on January 10, 2014 between the Company and Intrexon, the Company entered into a Supplemental Stock Issuance Agreement with Intrexon. The Company agreed to issue to Intrexon, who is an affiliate of NRM VII Holdings I, LLC, the Company s largest shareholder, a number of shares of Company common stock based on a per share

value of the closing price of the Company s common stock on the NYSE MKT on the day prior to execution of the Supplemental Stock Issuance Agreement (the Supplemental Access Fee Shares). The Supplemental Access Fee Shares were issued upon the satisfaction of customary closing conditions, including the approval for the listing of the Supplemental Access Fee Shares on the NYSE MKT. The closing took place on January 24, 2014. The Company will record a fair value of $5.2 million for 1,024,590 shares, on a per share value of $5.03 based on the closing price of the Company s common stock on the closing date, issued to Intrexon for the closing of the Supplemental Stock

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Issuance Agreement as a research and development expense in the first quarter of 2014. For additional discussion on Intrexon, see Notes 10 and 14.

Note 19. Quarterly Financial Information (unaudited)

This table summarizes the unaudited consolidated financial results of operations for the quarters ended (amounts in thousands except per share data):

	March 31,	June 30,	September 30,	December 31,
2013 Quarter Ended				
Net product sales	$ 26	$ 62	$ 68	$ 44
Cost of sales (excluding amortization of product rights)	2,351	2,242	1,930	1,529
Operating expenses	3,579	3,634	11,259	4,179
Other income (expense)	1,338	(8,818)	6,520	(91)
Income tax expense (benefit)				
Loss from discontinued operations, net	(4)	(5)	(4)	13
Net income (loss)	$ (4,570)	$ (14,637)	$ (6,605)	$ (5,741)
Basic net income (loss) per share	$ (0.17)	$ (0.63)	$ (0.24)	$ (0.15)
Diluted net income (loss) per share	$ (0.18)	$ (0.63)	$ (0.31)	$ (0.15)
2012 Quarter Ended				
Net product sales	$ 16	$ 28	$ 69	$ 40
Cost of sales (excluding amortization of product rights)	1,553	2,095	2,321	2,386
Operating expenses	4,202	3,627	3,058	10,301
Other (expense) income	6,665	(5,416)	13,480	(982)
Income tax expense	2,500			
Loss from discontinued operations, net	(7)	1	5	(10)
Gain on sale of discontinued operations, net			443	24
Net loss attributable to noncontrolling interest	(11)		(4)	(9)
Net income (loss)	$ 3,408	$ (11,109)	$ 8,614	$ (13,624)
Basic net income per share	$ 0.89	$ (2.87)	$ 2.18	$ (0.57)
Diluted net income per share	$ 0.83	$ (5.35)	$ 1.35	$ (0.57)
2011 Quarter Ended				
Net product sales	$ 209	$ 253	$	$ (462)
Cost of sales (excluding amortization of product rights)	98	126	3	(214)
Operating expenses	3,971	4,867	5,710	5,418
Other (expense) income	(13,190)	(5,356)	11,858	2,736
Income tax expense				
Loss from discontinued operations, net	(12)	(6)	(49)	(27)
Gain on sale of discontinued operations, net				
Net loss attributable to noncontrolling interest	(20)		(6)	8
Net income (loss)	$ (17,082)	$ (10,102)	$ 6,090	$ (2,949)
Basic net income per share	$ (20.12)	$ (7.93)	$ 2.18	$ (0.77)
Diluted net income per share	$ (20.12)	$ (7.93)	$ 1.59	$ (0.77)