

**Lion Biotechnologies, Inc.**  
**20,989,625 Shares of Common Stock**

This prospectus relates to the sale of up to 7,010,403 shares of our currently outstanding shares of common stock that are owned by some of our stockholders, 2,847,000 shares of our common stock issuable upon the conversion of currently outstanding shares of our Series A Convertible Preferred Stock that are owned by some of our stockholders, and 11,132,222 shares issuable upon the exercise of currently outstanding common stock purchase warrants held by some of the warrant holders. All of the shares included in this prospectus were sold on November 5, 2013 in a \$23.3 million private placement of our securities to various institutional and individual accredited investors. For a list of the selling stockholders, please see "Selling Stockholders." The selling stockholders may sell these shares from time to time in the principal market on which our common stock is traded at the prevailing market price or in negotiated transactions. The selling stockholders may be deemed underwriters within the meaning of the Securities Act of 1933, as amended, of the shares of common stock that they are offering. We will pay the expenses of registering these shares. We will not receive proceeds from the sale of our shares by the selling stockholders that are covered by this prospectus. However, we will receive payment in cash upon any exercise of the warrants, and any proceeds we receive will be used for general corporate purposes and for working capital.

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

Our common stock is listed for quotation on the OTC QB, under the symbol "LBIO". There is limited trading in our common stock. On September 29, 2014, the most recent day that our stock traded, the last reported price per share of our common stock was \$7.07.

**You should understand the risks associated with investing in our common stock. Before making an investment, read the "Risk Factors," which begin on page 4 of this prospectus.**

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

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.**

**The date of this prospectus is September 29, 2014**

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## TABLE OF CONTENTS

	Page
<a href="#">PROSPECTUS SUMMARY</a>	<a href="#">1</a>
<a href="#">RISK FACTORS</a>	<a href="#">4</a>
<a href="#">FORWARD-LOOKING STATEMENTS</a>	<a href="#">16</a>
<a href="#">USE OF PROCEEDS</a>	<a href="#">17</a>
<a href="#">BUSINESS</a>	<a href="#">17</a>
<a href="#">MARKET PRICE AND DIVIDENDS ON COMMON EQUITY AND RELATED STOCKHOLDER MATTERS</a>	<a href="#">31</a>
<a href="#">MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</a>	<a href="#">32</a>
<a href="#">DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS</a>	<a href="#">40</a>
<a href="#">EXECUTIVE COMPENSATION</a>	<a href="#">46</a>
<a href="#">CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS</a>	<a href="#">54</a>
<a href="#">SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT</a>	<a href="#">55</a>
<a href="#">SELLING STOCKHOLDERS</a>	<a href="#">57</a>
<a href="#">PLAN OF DISTRIBUTION</a>	<a href="#">64</a>
<a href="#">DESCRIPTION OF SECURITIES</a>	<a href="#">66</a>
<a href="#">DISCLOSURE OF SEC POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES</a>	<a href="#">68</a>
<a href="#">LEGAL MATTERS</a>	<a href="#">68</a>
<a href="#">EXPERTS</a>	<a href="#">68</a>
<a href="#">WHERE YOU CAN FIND ADDITIONAL INFORMATION</a>	<a href="#">69</a>
<a href="#">INDEX TO FINANCIAL STATEMENTS</a>	<a href="#">F-1</a>

This prospectus is part of a registration statement we filed with the Securities and Exchange Commission (the “SEC”). You should rely only on the information provided in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities other than the common stock offered by this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any common stock in any circumstances in which such offer or solicitation is unlawful. The selling stockholders are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted.

Neither the delivery of this prospectus nor any sale made in connection with this prospectus shall, under any circumstances, create any implication that there has been no change in our affairs since the date of this prospectus or that the information contained by reference to this prospectus is correct as of any time after its date. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of common stock. The rules of the SEC may require us to update this prospectus in the future.

## PROSPECTUS SUMMARY

*This summary highlights information contained elsewhere in this prospectus; it does not contain all of the information you should consider before investing in our common stock. You should read the entire prospectus before making an investment decision.*

*Throughout this prospectus, the terms “we,” “us,” “our,” and “our company” refer to Lion Biotechnologies, Inc., a Nevada corporation formerly known as Genesis Biopharma, Inc.*

*All references to the number of shares issued or outstanding in this prospectus, and all per share and other similar data, reflect a 1-for-100 reverse stock split that we effected on September 26, 2013.*

### Overview

Lion Biotechnologies, Inc. is an emerging biotechnology company focused on developing and commercializing adoptive cell therapy (ACT) using autologous tumor infiltrating lymphocytes (TILs) for the treatment of metastatic melanoma and other solid cancers. ACT utilizes the patient’s own immune system (T-cells harvested from a patient) to treat cancer in that patient. TILs, a kind of anti-tumor T-cell that are naturally present in a patient’s tumors, are collected from individual patient tumor samples. The TILs are then activated and expanded *ex vivo* and then infused back into the patient to fight their tumor cells.

ACT using TILs was developed by Dr. Steven Rosenberg, Chief of Surgery at the National Cancer Institute (NCI) and a recognized pioneer in immuno-oncology. We have (i) acquired a worldwide, non-exclusive license for various adoptive cell therapy technologies from the National Institutes of Health (NIH), an agency of the United States Public Health Service within the Department of Health and Human Services, and (ii) entered into a Cooperative Research and Development Agreement (CRADA) with the NCI, pursuant to which we intend to support the *in vitro* development of improved methods for the generation and selection of TILs, develop approaches for large-scale production of TILs, and conduct clinical trials using these improved methods of generating TILs for the treatment of metastatic melanoma. Currently, we are also in discussions with the NIH to license additional rights to next generation T-cell technology that may have higher potency, persist over a longer period of time, require fewer cells, and have a lower manufacturing cost. However, no assurance can be given that we will be able to license these additional rights.

TIL therapy is presently available as a physician-sponsored investigational therapy for the treatment of metastatic melanoma at several institutions, including the NCI, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer Center & Research Institute. Although we are sponsoring development of TILs at NCI and work closely with some of the physicians involved in developing these technologies at other institutions, we are not direct sponsors of the clinical trials at these other institutions. Clinical trials in small patient populations at different institutions show that durable response rates can be observed in approximately half of metastatic melanoma patients treated with TIL therapy. Complete responses can be seen in about 10% of metastatic melanoma patients treated with TILs.

Unfortunately, manufacturing TILs is currently labor intensive, costly, and time-consuming, which has limited its widespread application. We have entered into a Manufacturing Services Agreement with Lonza Walkersville, Inc. (Lonza) pursuant to which Lonza has agreed to manufacture, package, ship and handle quality assurance and quality control of our TIL therapy. Lonza has commenced developing a commercial-scale manufacturing process for the TIL therapy. Our goal is to develop and establish a manufacturing process for the large-scale production of TILs that is in accord with current Good Manufacturing Practices (cGMP). By providing centralized manufacturing, we believe TIL therapy can be more widely available to a larger number of cancer patients.

Since 2011 we have worked with NCI to develop new systems for large scale manufacturing of TILs and to transfer the manufacturing process to Lonza for further development. In addition, the NCI, under our CRADA, is currently continuing to test TILs in metastatic melanoma patients either alone, or in combination with other therapeutic agents. This work has been supported by research payments of \$3.0 million that we have to date made to the NCI under the CRADA. We intend to supplement the research being conducted under the CRADA with research to be conducted under the auspices of Dr. Laszlo Radvanyi at our new Tampa, Florida, research facility that we are currently establishing in Tampa, Florida, near the H. Lee Moffitt Cancer Center & Research Institute on the Tampa campus of the University of South Florida, and through a clinical trial grant agreement we entered into with Moffitt Cancer Center in July 2014 to expand an ongoing Phase 1 study of TILs combined with the checkpoint inhibitor ipilimumab (Yervoy) in patients with metastatic melanoma. Our research and development facility, when fully operational later this year, is expected to employ up to a dozen employees or contractors.

Our goal is to initiate a company-sponsored Phase 2 clinical trial early in 2015 to evaluate the safety and efficacy of the manufacturing and testing processes that Lonza is establishing at its facilities for us. We expect it will take approximately 12-18 months and will cost at least \$3-4 million to develop the more robust manufacturing process that is needed before we can initiate a Phase 3 clinical trial in 2016. Initiation of this Phase 3 clinical trial is dependent on FDA's agreement with our clinical trial plans as well as validation of our manufacturing and testing processes. Since we completed a \$23.3 million private placement in November 2013, we believe that we have sufficient funds to reach the Phase 3 trial stage. The cost of a Phase 3 registration trial, however, is estimated to be at least \$30-35 million, and will require us to treat 300 or more patients and will take at least three years to complete. Although we believe that we have sufficient capital to fund our anticipated research and development and working capital needs for at least the next 12 months, we do not have sufficient funds for the Phase 3 registration trial and, therefore, will have to raise additional capital to complete the trial.

We are a development stage company that to date has out-sourced all of its research and development activities. However, with the opening of the Tampa facility we will be conducting a significant portion of our research activities in-house, in the future. As of the date of this prospectus, we only had nine full time employees. To date, we have not generated any revenues. From the date of our inception through June 30, 2014, we have incurred net losses of \$68,877,000.

### **Company History**

We filed our original Articles of Incorporation with the Secretary of State of Nevada on September 17, 2007. Until March 2010, we were an inactive company known as Freight Management Corp. On March 15, 2010, we changed our name to Genesis Biopharma, Inc. and in 2011 we commenced our current business. On September 26, 2013, we amended and restated our Articles of Incorporation to, among other things, change our name to Lion Biotechnologies, Inc., effect a 1-for-100 reverse stock split (pro-rata reduction of outstanding shares) of our common stock, increase (after the reverse stock split) the number of our authorized number of shares of common stock to 150,000,000 shares, and authorize the issuance of 50,000,000 shares of "blank check" preferred stock, \$0.001 par value per share.

Our principal executive offices are located at 21900 Burbank Boulevard, 3<sup>rd</sup> Floor, Woodland Hills, California 91367, and our telephone number at that address is (818) 992-3126. Our website is located at [www.lionbio.com](http://www.lionbio.com). Information on our website is not, and should not be considered, part of this prospectus.

### **The Private Placement**

On November 5, 2013, we sold \$23.3 million of our securities to various institutional and individual accredited investors in a private placement (the "Private Placement"). In the Private Placement, we issued (i) 3,145,300 shares of our common stock, (ii) 17,000 shares of our new Series A Convertible Preferred Stock (the "Series A Preferred"), and (iii) warrants ("Warrants") to purchase a total of 11,645,300 shares of common stock. The purchasers of common stock received warrants to purchase the same number of shares of common stock as such investors purchased in the Private Placement, and the investors who purchased shares of Series A Preferred received warrants to purchase the number of shares of common stock into which the Series A Preferred is initially convertible. The purchase price of each common stock/Warrant unit was \$2.00, and the purchase price of each Series A Preferred/Warrants unit was \$1,000. The Series A Preferred is convertible into shares of common stock at any initial conversion price of \$2.00 per share. We received net proceeds of approximately \$21.8 million from the Private Placement, after paying placement agent fees and estimated offering expenses, which we will use to fund our research and development and for working capital purposes.

Since the completion of the Private Placement, investors in the Private Placement have exercised Warrants for the purchase of an aggregate of 1,239,934 shares of our common stock (with an aggregate exercise price of \$3,099,835) and have converted 11,306 shares of the Series A Preferred into 5,653,000 shares of common stock.

Roth Capital Partners, LLC acted as the lead placement agent for the Private Placement. As compensation for the services of Roth Capital Partners, LLC and the other participating placement agents, we paid a total of approximately \$1,454,000 of placement agent fees, and issued to the placement agents common stock purchase warrants to purchase up to 726,856 shares of our common stock with the same initial exercise price and terms as the Warrants. The shares underlying the warrants that we issued to the placement agents are included in this prospectus.

We filed the registration statement of which this prospectus is a part to fulfill certain of our contractual obligations to the investors in the Private Placement under a registration rights agreement we entered into pursuant to the Securities Purchase Agreement.

### The Offering

Common Stock offered by the selling stockholders	20,989,625 shares (1)
Common Stock offered by us	None
Common Stock currently outstanding	27,432,850 shares(2)
Common Stock to be outstanding after the offering	41,553,114 shares (1)(3)
OTC QB trading symbol	LBIO
Use of proceeds	We will not receive any proceeds from the sale of the common stock offered hereby. However, to date we have received \$3,099,835 of proceeds from the exercise of the Warrants, and we may receive up to an additional maximum of approximately \$27,830,555 of gross proceeds from the exercise of Warrants by selling stockholders. All proceeds we receive from the exercise of Warrants have been used, and are expected to be used in the future for general working capital. No assurances can be given, however, that any portion or all of the remaining Warrants will ever be exercised.

Risk Factors	An investment in our common stock involves significant risks. See “Risk Factors” beginning on page 4, below.
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- (1) Represents the number of shares of common stock that may hereafter be sold under this prospectus. Includes shares of common stock issued to investors in the Private Placement, shares of common stock currently issuable upon the conversion of the Series A Preferred, and shares of common stock issuable upon the exercise of the warrants issued in the Private Placement to investors and to the placement agents.
- (2) Does not include (i) 338,750 shares of common stock issuable upon the exercise of outstanding options (with exercise prices ranging from \$3.125 to \$125.00 per share) and warrants (with exercise prices ranging from \$2.50 to \$126.00), or (ii) the 13,979,222 shares of common stock issuable upon the conversion of all of the Series A Preferred and the exercise of all of the remaining outstanding warrants issued in the Private Placement. Includes 640,000 shares of outstanding restricted stock held by certain of our executive officers, which shares are subject to forfeiture if the executives terminate their employment with us before all such shares fully vest in 2017.
- (3) Assumes the conversion of all of the remaining outstanding shares of Series A Preferred and the exercise of all of the remaining warrants by the selling stockholders at an exercise price of \$2.50, but does not include the 338,750 shares of common stock issuable upon the exercise of outstanding options and other warrants.

## RISK FACTORS

*An investment in our securities involves a high degree of risk. You should carefully consider the risks described below before deciding to invest in or maintain your investment in our company. If any of these risks actually occur, our business, financial conditions, results of operations and future prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock could decline, and you may lose all or a part of your investment in our common stock. The risks described below represent all of the material risks that are currently known to us.*

### **Risks Related To Our Business**

***We have a history of operating losses; we expect to continue to incur losses and we may never be profitable.***

As of June 30, 2014, we had an accumulated deficit of \$68,897,000. In addition, during the fiscal year ended December 31, 2013 and the six month period ended June 30, 2014, we incurred a net loss of \$25,381,000 and \$4,370,000, respectively. These losses have resulted from costs attributed to our acquisition of Lion Biotechnologies, Inc., a Delaware company, in July 2013, from stock based compensation expenses for securities issued to our executives and consultants, from research and development expenses, and from our general and administrative costs. Since our inception we have not generated any revenues. We do not expect to generate any product sales or royalty revenues for at least four years, if ever. We expect to incur significant additional operating losses in the future as we expand research and development and clinical trial efforts.

Our ability to achieve long-term profitability is dependent upon obtaining regulatory approvals for our products and successfully commercializing our products alone or with third parties. However, our operations may not be profitable even if any of our products under development are successfully developed and produced and thereafter commercialized.

Even if we succeed in commercializing one or more of our product candidates, we expect to continue to incur substantial research and development and other expenditures to develop and market additional product candidates. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our stockholders' equity and working capital.

***We have limited experience in operating our current business, which makes it difficult to evaluate our business plan and our prospects.***

Until March 2010, we were an inactive company known as Freight Management Corp. In March 2010, we acquired certain intellectual property related to a proprietary, therapeutic use of anti-CD55+ antibodies for the treatment of cancer and commenced developing biotechnology drugs based on the anti-CD55+ antibodies. However, test results from the studies performed for us as part of the anti-CD55+ antibody program failed to meet the pre-clinical development endpoints, and in 2011 we decided to terminate the development of products based on the anti-CD55+ antibodies and to enter into our current business. Our business is substantially dependent upon the NIH License Agreement, the CRADA and the manufacturing services agreement with Lonza Walkersville, Inc., all of which we entered into since mid-2011. In addition, in 2013 we hired a new Chief Executive Officer and made substantial changes to the membership of our Board of Directors. As a result, we have only a limited operating history in our current line of business on which a decision to invest in our company can be based. The future of our company currently is dependent upon our ability to implement our new business plan, as that business plan may be modified from time to time by our new management. While we believe that we have a sound business plan and research and development strategy, we have only a limited operating history against which we can test our plans and assumptions, and investors therefore cannot evaluate the likelihood of our success.

We face the problems, expenses, difficulties, complications and delays normally associated with a small, new biotechnology company, many of which are beyond our control. Accordingly, our prospects should be considered in light of the risks, expenses and difficulties frequently encountered in the establishment of a new business developing new technologies in an industry that characterized by a number of market entrants and intense competition. As of the date of this prospectus, we have only nine full-time employees and limited resources. As a result, we may not possess the ability to successfully overcome many of the risks and uncertainties frequently encountered by early stage companies involved in the new and rapidly evolving field of biotechnology in general and in cancer treatment in particular. Since we are still developing our technologies, if our research and development efforts are successful, we may also face the risks associated with the shift from development to commercialization of new products based on innovative technologies. There can be no assurance that we will be successful in developing our new business.

***We currently have no revenues, a limited amount of cash available, and will need to raise substantial additional capital to operate our business.***

We do not expect to generate any revenues until, and if, we receive approval from the FDA and other regulatory authorities for our product candidates allowing us to sell our products. As a result of the funding we received in November 2013 from the Private Placement, we now have sufficient cash to fund our anticipated research and development and working capital needs for at least the next twelve months. However, it is expensive to develop cell therapies for the treatment of cancer, and to conduct clinical trials for such therapies. Based on our internal projections, we estimate that we will spend approximately \$8-\$10 million over the next twelve months to conduct or support additional clinical trials to support development of our products, support research and development, and for developing our manufacturing process. In addition, general and administrative expenses will significantly increase by the end of 2014 and thereafter as we expand the scope of our operations. The funds we have in hand are only sufficient to partially fund our proposed research and development efforts and to fund only a portion of our anticipated clinical trial expenses. Therefore, we will need to raise significant amounts of additional capital to fund general and administrative expenses, to continue the research and development of our adoptive cell therapies, and to commercialize our adoptive cell therapies. Our ability to obtain such additional debt or equity funding will depend on a number of factors, including but not limited to the following:

- our degree of success in developing our adoptive cell therapy products;
- the rate of progress and cost of our research and development and clinical trial activities;
- the costs of preparing, filing, prosecuting, maintaining and enforcing patent claims and other intellectual property rights;
- emergence of competing technologies and other adverse market developments; and
- the cost of developing and establishing the necessary manufacturing processes and facilities.

We have not identified the sources for the additional financing that we will require, and we do not have commitments from any third parties to provide this financing. Certain investors may be unwilling to invest in our securities since we are traded on the OTC QB market and not on a national securities exchange, particularly if there is only limited trading in our common stock on the OTC QB market at the time we seek financing. We intend to seek a national securities exchange listing for our common stock, but no assurance can be given of such listing or that the trading liquidity will improve even after such a listing. The volume and frequency of such trading has been limited and erratic to date. There is no assurance that sufficient funding through a financing will be available to us at acceptable terms or at all. These factors, and our ability to meet our obligations from current operations, and the need to raise additional capital to accomplish our objectives, create a substantial doubt about our ability to raise the additional funds we anticipate that we will need.

We may not be able to obtain additional financing on favorable terms or at all. If we are unable to raise additional funds when we need them, we may be required to delay, reduce or eliminate some or all of our development programs and some or all of our clinical trials. If we do not raise additional funds, we may be required to cease all operations and close our company, in which case our stockholders will suffer a total loss on their investment. If we do raise additional funds by issuing equity securities, further dilution to stockholders will result, and new investors could have rights superior to holders of shares issued in this offering. Any additional funding that we obtain in a financing is likely to reduce the percentage ownership of the company held by our existing security holders. The amount of this dilution may be substantially increased if the trading price of our common stock has declined at the time of any financing from its current levels.

***The deviations in our proposed new products from existing products may require us to perform additional testing, which will increase the cost, and extend the time for obtaining approval.***

Our TIL based therapy is based on the ACT technology that we licensed from the NIH and that is presently available as a physician-sponsored investigational therapy for the treatment of Stage IV metastatic melanoma in the U.S. at the National Cancer Institute, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer & Research Institute. The current method of treatment is very labor intensive and expensive, which has limited its widespread application. We are planning to develop new processes that we anticipate will enable more efficient manufacturing of our products. We may have difficulty demonstrating that the new products produced from our new processes are identical to the existing products. The FDA may require additional clinical testing before permitting a larger clinical trial with the new processes, and also the new product may not be as efficacious in the new clinical trials. Cellular products are not considered as well characterized products because there are hundreds of markers present on these cells, and even small changes in manufacturing processes could alter the cell types. It is unclear at this time which of those markers are critical for success of these cells to combat cancer, so our ability to predict the outcomes with newer manufacturing processes is limited. The changes that we may make to the existing manufacturing process may require additional testing, which may increase costs and timelines associated with these developments.

In addition to developing a TIL based therapy on existing ACT technology, we are currently evaluating the desirability of conducting clinical trials of our products in combination with other existing drugs for the treatment of metastatic melanoma. These combination therapies will require additional testing and clinical trials will require additional FDA regulatory approval and will increase our future cost of expenses.

***We are highly dependent on our key personnel, and if we are not successful in attracting and retaining highly qualified personnel, we may not be able to successfully implement our business strategy.***

Our ability to compete in the highly competitive biotechnology and pharmaceutical industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. We are highly dependent on our management and scientific personnel, including our Chief Executive Officer and our Chief Scientific Officer. The loss of the services of any of our executive officers, other key employees, and other scientific advisors, and our inability to find suitable replacements could result in delays in product development and harm our business.

To induce valuable employees to remain at our company, in addition to salary and cash incentives, we grant our employees restricted stock and/or stock options that vest over time. The value to employees of restricted stock and stock options that vest over time may be significantly affected by movements in our stock price that are beyond our control, and may at any time be insufficient to counteract more lucrative offers from other companies. Despite our efforts to retain valuable employees, members of our management, scientific and development teams may terminate their employment with us on short notice. Although we have employment agreements with our key employees, any of our employees could leave our employment at any time, with or without notice. We do not maintain “key man” insurance policies on the lives of these individuals or the lives of any of our other employees. Our success also depends on our ability to continue to attract, retain and motivate highly skilled junior, mid-level and senior managers as well as junior, mid-level and senior scientific and medical personnel. However, competition for qualified employees among companies in the biotechnology and biopharmaceutical industry is intense, and no assurance can be given that we will be able attract, hire, retain and motivate the highly skilled employees that we need. If we are unable to hire new skilled personnel, including management, our ability to properly develop our products and to implement our business plan will be adversely affected, which will result in a reduction in the value of our shares of common stock.



***We are subject to extensive regulation, which can be costly, time consuming and can subject us to unanticipated delays; even if we obtain regulatory approval for some of our products, those products may still face regulatory difficulties.***

All of our potential products, cell processing and manufacturing activities, are subject to comprehensive regulation by the FDA in the United States and by comparable authorities in other countries. The process of obtaining FDA and other required regulatory approvals, including foreign approvals, is expensive and often takes many years and can vary substantially based upon the type, complexity and novelty of the products involved. In addition, regulatory agencies may lack experience with our technologies and products, which may lengthen the regulatory review process, increase our development costs and delay or prevent their commercialization.

No adoptive cell therapy using tumor infiltrating lymphocytes has been approved for marketing in the U.S. by the U.S. Food and Drug Administration (FDA). Consequently, there is no precedent for the successful commercialization of products based on our technologies. In addition, we have had only limited experience in filing and pursuing applications necessary to gain regulatory approvals, which may impede our ability to obtain timely FDA approvals, if at all. We have not yet sought FDA approval for any adoptive cell therapy product. We will not be able to commercialize any of our potential products until we obtain FDA approval, and so any delay in obtaining, or inability to obtain, FDA approval would harm our business.

If we violate regulatory requirements at any stage, whether before or after marketing approval is obtained, we may be fined, forced to remove a product from the market and experience other adverse consequences including delay, which could materially harm our financial results. Additionally, we may not be able to obtain the labeling claims necessary or desirable for the promotion of our products. We may also be required to undertake post-marketing trials. In addition, if we or others identify side effects after any of our adoptive cell therapies are on the market, or if manufacturing problems occur, regulatory approval may be withdrawn and reformulation of our therapies, additional clinical trials, changes in labeling of our therapies, and additional marketing applications may be required.

***It may take longer and cost more to complete our clinical trials than we project, or we may not be able to complete them at all.***

For budgeting and planning purposes, we have projected the date for the commencement, continuation and completion of our various clinical trials. However, a number of factors, including scheduling conflicts with participating clinicians and clinical institutions, and difficulties in identifying and enrolling patients who meet trial eligibility criteria, may cause significant delays. We may not commence or complete clinical trials involving any of our products as projected or may not conduct them successfully.

Our goal is to file an IND application with the FDA for a Phase 2 company-sponsored clinical trial early in 2015 and, subject to FDA approval, to initiate a Phase 3 clinical trial in 2016 in second line metastatic melanoma (those refractory to existing treatments) patients. We anticipate that we will have to treat 300 or more patients at up to 10 medical institutions. However, because we have not yet obtained the FDA's approval for our proposed Phase 3 trial, the scope of that Phase 3 trial is still uncertain (including uncertainties as to whether it will be a pivotal trial, how many patients we will have to treat, and what kind of patients those will be). Depending on the FDA's requirements, the Phase 3 trial could differ substantially from our plans and could cost more, and take longer than we anticipate.

We expect to rely on medical institutions, academic institutions or clinical research organizations to conduct, supervise or monitor some or all aspects of clinical trials involving our products. We will have less control over the timing and other aspects of these clinical trials than if we conducted them entirely on our own. If we fail to commence or complete, or experience delays in, any of our planned clinical trials, our stock price and our ability to conduct our business as currently planned could be harmed.

We currently anticipate that we will have to rely on our manufacturing partner, Lonza Walkersville, Inc., to manufacture our adoptive cell therapy products for Phase 2 and Phase 3 clinical trials. If Lonza fails to commence or complete, or experiences delays in, manufacturing our adoptive cell therapy products, our planned clinical trials will be delayed, which will adversely affect our ability to conduct our business as currently planned.

***We may not be able to license new TIL technology from the NIH as we plan to do, and any products that we may develop based on that new technology may not be as effective as current products and cost more to develop than we anticipated.***

We have commenced discussions with the NIH to obtain a license from the NIH for a next generation TILs technology that may significantly reduce our costs of production and could potentially increase the potency of the product. No assurance can be given that we will be successful in licensing these technologies on attractive terms, or at all. In addition, there is no guarantee that the next generation technology will have similar clinical effects in clinical trials in terms of safety and efficacy of the product. Our development of a product based on the new TIL's technology may require significant clinical development prior to any registration trials. These additional trials may be extensive and may increase timelines associated with our development of such a product.

***If testing of a particular product does not yield successful results, then we will be unable to commercialize that product.***

Our research and development programs are at an early stage. We must demonstrate our products' safety and efficacy in humans through extensive clinical testing. We may experience numerous unforeseen events during, or as a result of, the testing process that could delay or prevent commercialization of our products, including but not limited to the following:

- safety and efficacy results in various human clinical trials reported in scientific and medical literature may not be indicative of results we obtain in our clinical trials;
- after reviewing test results, we or our collaborators may abandon projects that we might previously have believed to be promising;
- we, our collaborators or regulators, may suspend or terminate clinical trials if the participating subjects or patients are being exposed to unacceptable health risks; and
- the effects our potential products have may not be the desired effects or may include undesirable side effects or other characteristics that preclude regulatory approval or limit their commercial use if approved.

Clinical testing is very expensive, can take many years, and the outcome is uncertain. Many months will elapse before we learn the results from any clinical trial using our adoptive cell therapy, and the data collected from our clinical trials may not be sufficient to support approval by the FDA of our TIL-based adoptive cell therapy using tumor infiltrating lymphocytes product candidates for the treatment of Stage IV metastatic melanoma or any other form of cancer. The clinical trials for our products under development may not be completed on schedule and the FDA may not ultimately approve any of our product candidates for commercial sale. If we fail to adequately demonstrate the safety and efficacy of any product candidate under development, we may not receive regulatory approval for those products, which would prevent us from generating revenues or achieving profitability.

***Our research and development plans are to a large extent dependent upon the CRADA.***

We expect to conduct a large portion of our research and development under the CRADA we entered into with the NCI. We are obligated to make quarterly payments of \$250,000 under the CRADA. However, we have limited control over the nature or timing of the NCI's clinical trials and limited visibility into their day-to-day activities, including with respect to how they are administering TIL therapy. The work under the CRADA is being conducted under Dr. Rosenberg. However, Dr. Rosenberg is engaged in other research activities that may receive higher priority than, or even compete with the research on our programs, which could delay the timing of our ability to conduct future planned clinical trials.

Although the CRADA has a five year term, either party to the CRADA has the right to terminate the CRADA upon 60 days' notice to the other party. As a result, no assurance can be given that the NCI will not terminate the CRADA in the future and that the CRADA will, therefore, remain in effect until we complete our desired research thereunder.

Under the CRADA, we have an option to negotiate commercialization licenses from the NIH to intellectual property developed in the course of the CRADA research plan. There can be no assurance that we would be able to successfully complete such negotiations and ultimately acquire the rights to such intellectual property.

***We have no experience as a company conducting clinical trials.***

All of the preclinical and clinical trials relating to TIL therapy have to date been conducted by the NCI and other institutions. We plan to start a Phase 2 bridging study for the treatment of metastatic melanoma early in 2015, and we plan to conduct a Phase 3 trial designed to treat metastatic melanoma patients refractory to other treatments with TILs therapy starting in 2016. Although we have recruited a team that has significant experience with clinical trials, we have no experience as a company in conducting clinical trials. In part because of this lack of experience, we cannot be certain that the design of the planned clinical trials will be optimal from an efficacy or outcome perspective, or that these trials will begin or be completed on time, if at all. Large-scale trials will require significant additional financial and management resources, and reliance on third-party clinical investigators, contract research organizations, or CROs, or consultants. Relying on third-party clinical investigators or CROs may cause us to encounter delays that are outside of our control.

***We are required to pay substantial royalties under our license agreement with the NIH, and we must meet certain milestones to maintain our license rights.***

Under our license agreement with the NIH for our adoptive cell therapy technologies, we are currently required to pay substantial royalties to that institution based on our revenues from sales of our products utilizing this technology, and these royalty payments could adversely affect the overall profitability for us of any products that we may seek to commercialize. In order to maintain our license rights under the NIH License agreement, we will need to meet certain specified milestones, subject to certain cure provisions, in the development of our product candidates. There is no assurance that we will be successful in meeting all of the milestones in the future on a timely basis or at all.

***Because our current product candidates represent and our other future potential product candidates will represent novel approaches to the treatment of disease, there are many uncertainties regarding the development, the market acceptance, third-party reimbursement coverage and the commercial potential of our product candidates.***

TIL therapy is presently available as a physician-sponsored investigational therapy of the treatment of metastatic melanoma at several institutions, including the NCI, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer & Research Institute on the Tampa campus of the University of South Florida, where our new research and development facilities are being built. However, TIL therapy is not commercially available, and there is no assurance that the approaches offered by our current product candidates or any future product candidates can be commercialized or gain broad acceptance among doctors or patients or that governmental agencies or third-party medical insurers will be willing to provide reimbursement coverage for proposed product candidates. Moreover, we do not have verifiable internal marketing data regarding the potential size of the commercial market for our product candidates, nor have we obtained independent marketing surveys to verify the potential size of the commercial markets for our current product candidates or any future product candidates. Since our current product candidates and any future product candidates will represent new approaches to treating various conditions, it may be difficult, in any event, to accurately estimate the potential revenues from these product candidates. Accordingly, we may spend large amounts of money trying to obtain approval for product candidates that have an uncertain commercial market. The market for any products that we successfully develop will also depend on the cost of the product. We do not yet have sufficient information to reliably estimate what it will cost to commercially manufacture our current product candidates, and the actual cost to manufacture these products could materially and adversely affect the commercial viability of these products. If we do not successfully develop and commercialize products based upon our approach, we will not become profitable, which would materially and adversely affect the value of our business.

***The market for our initial product candidates may be small.***

We are initially developing a TIL therapy as a third line treatment of stage IV metastatic melanoma for patients who have failed all other currently approved treatments. The number of melanoma patients in this category is estimated to be approximately 8,000 annually. Not all of these patients can receive our TIL therapy because, among other factors, many patients have lesions that cannot be resected to collect their TILs. Our projections of both the number of people who have the cancers we are targeting, as well as the subset of people with these cancers in a position to receive third line therapy, and who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including scientific literature, surveys of clinics, patient foundations, or market research, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these cancers. The number of patients may turn out to be lower than expected. Even if we obtain significant market share for this product candidate, because the potential target populations are small, we may never achieve profitability based solely on this initial product candidate without obtaining regulatory approval for additional indications, including to be used as first or second line therapy.

***No assurance can be given that we will be able to develop a new, more efficient manufacturing process upon which our business plan to commercialize TIL-based products is dependent.***

Pursuant to the CRADA, and in cooperation with Lonza Walkersville and potentially other manufacturers, we intend to develop improved methods for generating and selecting autologous TILs, and to develop methods for large-scale production of autologous TILs that are in accord with current Good Manufacturing Practices (“cGMP”) procedures. Developing a new, scaled-up, pharmaceutical manufacturing process that can more efficiently, and in a more automated manner measure, produce and control the physical and/or chemical attributes of our products in a cGMP facility is subject to many uncertainties and difficulties. We have never manufactured our adoptive cell therapy product candidate on any scale, commercial or otherwise, nor has Lonza Walkersville, Inc., our main manufacturing provider. As a result, we cannot give any assurance that we will be able to establish a manufacturing process that can produce our products at a cost or in quantities necessary to make them commercially viable. Moreover, our third-party manufacturers will have to continually adhere to current cGMP regulations enforced by the FDA through its facilities inspection program. If the facilities of these manufacturers cannot pass a pre-approval plant inspection, the FDA premarket approval of our products will not be granted. In complying with cGMP and foreign regulatory requirements, we and any of our third-party manufacturers will be obligated to expend time, money and effort in production, record-keeping and quality control to assure that our products meet applicable specifications and other requirements. If we or any of our third-party manufacturers fail to comply with these requirements, we may be subject to regulatory action. No assurance can be given that we will be able to develop such a manufacturing process, or that our partners will thereafter be able to establish and operate such a production facility.

***We cannot prevent other companies from licensing the same intellectual properties that we have licensed or from otherwise duplicating our business model and operations.***

The intellectual properties that we are using to develop TIL-based cancer therapy products were licensed to us by the NIH under the License Agreement. However, the License Agreement is non-exclusive, and any other party could obtain a license for some or all of the licensed intellectual properties that we currently use. No assurance can be given that the NIH has not previously licensed, or that the NIH hereafter will not license to other biotechnology companies some or all of the technologies available to us under the License Agreement. In addition, since the National Cancer Institute, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer & Research Institute and others already use the ACT technology in therapy for the treatment of Stage IV metastatic melanoma, their methods and data are also available to third parties, who may want to enter into our line of business and compete against us. We currently do not own any exclusive rights that could be used to prevent third parties from duplicating our business plan or from otherwise directly competing against us. While technologies that may be developed for us under the CRADA are expected to provide us with the exclusive rights to those technologies, no assurance can be given that these new rights will be sufficient to prevent others from duplicating our business plan or from providing substantially similar products.

***If we are unable to protect our proprietary rights, we may not be able to compete effectively or operate profitably.***

Our success is dependent in part on maintaining and enforcing the patents and other proprietary rights that we have licensed and may develop, and on our ability to avoid infringing the proprietary rights of others. Patent law relating to the scope of claims in the biotechnology field in which we operate is still evolving and, consequently, patent positions in our industry may not be as strong as in other more well-established fields. Accordingly, the United States Patent and Trademark Office may not issue patents from the patent applications owned by or licensed to us. If issued, the patents may not give us an advantage over competitors with similar technology.

The issuance of a patent is not conclusive as to its validity or enforceability and it is uncertain how much protection, if any, will be given to the patents we have licensed from the NIH if either the NIH or we attempt to enforce the patents and if they are challenged in court or in other proceedings, such as oppositions, which may be brought in foreign jurisdictions to challenge the validity of a patent. A third party may challenge the validity or enforceability of a patent after its issuance by the Patent Office. It is possible that a competitor may successfully challenge our patents or that a challenge will result in limiting their coverage. Moreover, the cost of litigation to uphold the validity of patents and to prevent infringement can be substantial. If the outcome of litigation is adverse to us, third parties may be able to use our patented invention without payment to us. Moreover, it is possible that competitors may infringe our patents or successfully avoid them through design innovation. To stop these activities we may need to file a lawsuit. These lawsuits are expensive and would consume time and other resources, even if we were successful in stopping the violation of our patent rights. In addition, there is a risk that a court would decide that our patents are not valid and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of our patents were upheld, a court would refuse to stop the other party on the ground that its activities are not covered by, that is, do not infringe, our patents.

We also intend to rely on unpatented technology, trade secrets and confidential information. Therefore, others may independently develop substantially equivalent information and techniques or otherwise gain access to or disclose our technology. We may not be able to effectively protect our rights in unpatented technology, trade secrets and confidential information. We require each of our employees, consultants and advisors to execute a confidentiality agreement at the commencement of an employment or consulting relationship with us. However, these agreements may not provide effective protection of our information or, in the event of unauthorized use or disclosure, they may not provide adequate remedies.

***Competition in the field of cancer therapy is intense and many of our competitors have substantially greater managerial resources than we have.***

Competition in the field of cancer therapy is intense and is accentuated by the rapid pace of technological development. Research and discoveries by others may result in breakthroughs which may render our products obsolete even before they generate any revenue. There are products currently under development by others that could compete with the products that we are developing. Many of our potential competitors have substantially greater research and development capabilities and manufacturing, marketing, financial and managerial resources than we do. Our competitors may:

- develop safer or more effective immunotherapeutics and other therapeutic products;
- reach the market more rapidly, reducing the potential sales of our products; or
- establish superior proprietary positions.

Potential competitors in the market for treating metastatic melanoma will be companies such as Bristol-Myers Squibb, Roche/Genentech, Merck, Amgen, Pfizer, and GlaxoSmithKline, which already have products on the market or in development. Other companies, such as Novartis, Celgene, Kite Pharmaceuticals, and Adaptimmune, which are focused on T cell therapies technologies to treat cancer, may also be competitors. All of these companies, and most of our other current and potential competitors have substantially greater research and development capabilities and financial, scientific, regulatory, manufacturing, marketing, sales, human resources, and experience than we do. Many of our competitors have several therapeutic products that have already been developed, approved and successfully commercialized, or are in the process of obtaining regulatory approval for their therapeutic products in the United States and internationally.

Universities and public and private research institutions are also potential competitors. While these organizations primarily have educational objectives, they may develop proprietary technologies or secure patent protection that we may need for the development of our technologies and products. We may attempt to license these proprietary technologies, but these licenses may not be available to us on acceptable terms, if at all.

Our competitors, either alone or with their collaborative partners, may succeed in developing technologies or products that are more effective, safer, more affordable or more easily commercialized than ours, and our competitors may obtain intellectual property protection or commercialize products sooner than we do. Developments by others may render our product candidates or our technologies obsolete making it difficult for us to generate revenues and the value of our common stock could decrease.

We anticipate that we will face increased competition in the future as new companies enter our markets and as scientific developments surrounding immunotherapy and other cancer therapies continue to accelerate. If our product candidates receive marketing approval but cannot compete effectively in the marketplace, our profitability and financial position would suffer.

***We will be dependent on third party vendors to design, build, maintain and support our manufacturing and cell processing facilities and our information technology infrastructure and systems.***

As a result of our strategy to out-source much of our research and development and all of our manufacturing, we rely very heavily on third parties to perform for us, or assist us with a variety of important functions, including research and development, manufacturing and clinical trials management. We also license all of our technology from others and, at this time, do not own any intellectual properties or technologies. We intend to rely upon Lonza Walkersville, Inc. or other third party contract manufacturers to produce large quantities of materials needed for clinical trials and product commercialization. Third party manufacturers may not be able to meet our needs with respect to timing, quantity or quality. If we are unable to contract for a sufficient supply of needed materials on acceptable terms, or if we should encounter delays or difficulties in our relationships with manufacturers, our clinical testing may be delayed, thereby delaying the submission of products for regulatory approval or the market introduction and subsequent sales of our products. Any such delay may lower our revenues and potential profitability.

We intend to rely heavily on third party vendors to design, build, maintain and support our information technology infrastructure and systems, and supply us with data center and bandwidth services. Any inability to design or delay in implementing such information technology infrastructure and systems that are compliant with 21 CFR §11, the FDA's guidelines on electronic records, and other regulations, or a disruption in network access or other services provided by these third party vendors, could significantly harm our business. Any financial or other difficulties our third-party vendors face may have negative effects on our business, the nature and extent of which we cannot predict. We will exercise little control over these third party vendors, which increases our vulnerability to any problems associated with the services they provide. We will need to license technology, software, and databases from third parties to facilitate certain aspects of the development of our information technology infrastructure and systems. Any errors, failures, interruptions or delays experienced in connection with these third party technologies and information services could negatively impact our business and could expose us to liabilities to third parties.

If any third party collaborator breaches or terminates its agreement with us, or fails to conduct its activities in a timely manner, the commercialization of our products under development could be slowed down or blocked completely. It is possible that our collaborators will change their strategic focus, pursue alternative technologies or develop alternative products, either on their own or in collaboration with others, as a means for developing treatments for the diseases targeted by our collaborative programs. The effectiveness of our collaborators in marketing our products will also affect our revenues and earnings.

We intend to continue to enter into additional third party collaborative agreements in the future. However, we may not be able to successfully negotiate any additional collaborative arrangements. If established, these relationships may not be scientifically or commercially successful.

***The use of our technologies could potentially conflict with the rights of others.***

Our potential competitors or others may have or acquire patent rights that they could enforce against us. If they do so, then we may be required to alter our products, pay licensing fees or cease activities. If our products conflict with patent rights of others, third parties could bring legal actions against us or our collaborators, licensees, suppliers or customers, claiming damages and seeking to enjoin manufacturing and marketing of the affected products. If these legal actions are successful, in addition to any potential liability for damages, we could be required to obtain a license in order to continue to manufacture or market the affected products. We may not prevail in any legal action and a required license under the patent may not be available on acceptable terms or at all.

***We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights.***

The cost to us of any litigation or other proceeding relating to intellectual property rights, even if resolved in our favor, could be substantial. Some of our competitors may be better able to sustain the costs of complex patent litigation because they have substantially greater resources. If there is litigation against us, we may not be able to continue our operations.

Should third parties file patent applications, or be issued patents claiming technology also used or claimed by us, we may be required to participate in interference proceedings in the United States Patent and Trademark Office to determine priority of invention. We may be required to participate in interference proceedings involving our issued patents and pending applications. We may be required to cease using the technology or to license rights from prevailing third parties as a result of an unfavorable outcome in an interference proceeding. A prevailing party in that case may not offer us a license on commercially acceptable terms.

***We are exposed to potential product liability claims, and insurance against these claims may not be available to us at a reasonable rate in the future.***

Our business exposes us to potential product liability risks, which are inherent in the testing, manufacturing, marketing and sale of pharmaceutical products. We do not have clinical trial insurance coverage, but we intend to obtain such liability coverage in the future. However, such insurance coverage may not be available to us at an acceptable cost, if at all. We may not be able to obtain insurance coverage that will be adequate to satisfy any liability that may arise. Regardless of merit or eventual outcome, liability claims may result in decreased demand for a product, injury to our reputation, withdrawal of clinical trial volunteers and loss of revenues. Thus, whether or not we are insured, a liability claim or product recall may result in losses that could be material.

#### **Risks Related to Our Securities**

***Our stock trading volume fluctuates and often trades at low volumes, so you may be unable to sell your shares at or near the quoted bid prices if you need to sell your shares.***

The shares of our common stock are traded on the OTC QB market. Shares on the OTC QB typically trade at lower volumes than on Nasdaq or on an exchange, meaning that the number of persons interested in purchasing our common shares at or near bid prices at any given time may be relatively small. In addition, the smaller number of persons interested in investing in our stock may be attributable to a number of other factors, including the fact that we are a small early stage company which is relatively unknown to stock analysts, stock brokers, institutional investors and others in the investment community who can generate or influence sales volume, and that even if we came to the attention of such institutionally oriented persons, they tend to be risk-averse in this environment and would be reluctant to follow an early stage company such as ours or purchase or recommend the purchase of our shares until such time as we became more seasoned and viable. As a consequence, there may be periods when trading activity in our shares is small as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. We cannot give you any assurance that a broader or more active public trading market for our common shares will develop or be sustained. Due to these conditions, we can give you no assurance that you will be able to sell your shares at or near bid prices or at all if you need money or otherwise desire to liquidate your shares. As a result, investors could lose all or part of their investment.

***You may have difficulty selling our shares because they may be deemed to be “penny stocks.”***

Our common stock may be deemed a “penny stock” (as that term is defined under Rule 3a51-1 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) in the future. Generally, a “penny stock” is a common stock that is not listed on a securities exchange and trades for less than \$5.00 a share. Prices often are not available to buyers and sellers and the market may be very limited. Penny stocks in start-up companies are among the riskiest equity investments. Broker-dealers who sell penny stocks must provide purchasers of these stocks with a standardized risk-disclosure document prepared by the SEC. The document provides information about penny stocks and the nature and level of risks involved in investing in the penny stock market. A broker must also provide purchasers with bid and offer quotations and information regarding broker and salesperson compensation and make a written determination that the penny stock is a suitable investment for the purchaser and obtain the purchaser’s written agreement to the purchase. Many brokers choose not to participate in penny stock transactions. Because of the penny stock rules, there may be less trading activity in penny stocks in any market that develops for our common stock in the future and stockholders are likely to have difficulty selling their shares.

***Our existing directors and executive officers hold a substantial amount of our common stock and may be able to prevent other stockholders from influencing significant corporate decisions.***

As of September 29, 2014, our officers and directors beneficially owned approximately 35% of our outstanding common stock. These stockholders, if they act together, may be able to direct, or materially affect the outcome of matters presented to our stockholders, including the election of our directors and other corporate actions such as:

- our merger with or into another company;
- a sale of substantially all of our assets; and
- amendments to our articles of incorporation.

The decisions of these stockholders may conflict with our interests or those of our other stockholders.

***Our securities are quoted on the OTC QB market, which may limit the liquidity and price of our securities more than if our securities were quoted or listed on or a national securities exchange.***

Our securities are currently quoted on the OTC QB market of the OTC Markets. Quotation of our securities on the OTC QB market may limit the liquidity and price of our securities more than if our securities were quoted or listed on a national securities exchange. Some investors may perceive our securities to be less attractive because they are traded in the over-the-counter market. In addition, as an OTC QB traded company, we do not attract the extensive analyst coverage that accompanies companies listed on a national securities exchange. Further, institutional and other investors may have investment guidelines that restrict or prohibit investing in securities traded in the over-the-counter market. These factors may have an adverse impact on the trading and price of our securities.

***The market price of our stock may be adversely affected by market volatility.***

The market price of our common stock is likely to be volatile and could fluctuate widely in response to many factors, including:

- announcements of the results of clinical trials by us or our competitors;
- developments with respect to patents or proprietary rights;
- announcements of technological innovations by us or our competitors;
- announcements of new products or new contracts by us or our competitors;



- actual or anticipated variations in our operating results due to the level of development expenses and other factors;
- changes in financial estimates by securities analysts and whether our earnings meet or exceed such estimates;
- conditions and trends in the pharmaceutical and other industries;
- general economic, political and market conditions and other factors; and
- the occurrence of any of the risks described in this prospectus.

***You may experience future dilution as a result of future equity offerings or other equity issuances.***

We will have to raise substantial amounts of additional capital in the future. To raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering.

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

As of September 11, 2014, we had approximately 27,229,350 shares of our common stock outstanding. Approximately 11,538,000 of the outstanding shares are currently held in street-name and are freely tradable shares. However, the 6,665,861 shares of outstanding common stock that are included in this prospectus can now be freely sold using this prospectus on the market. In addition, the number of registered shares will increase by an additional 14,323,764 shares if all of the remaining shares of Series A Preferred are converted into shares of our common stock and all of the remaining warrants issued in the Private Placement are exercised for the purchase of additional shares of our common stock. During the past year, however, the average daily trading volume of our shares has fluctuated significantly, and there have been days in which the number of shares that were traded was very small. The sudden release of all of these additional freely trading shares onto the market would, most likely, have an adverse effect on the trading price of our stock. In addition to the shares that may be registered for re-sale under this prospectus, almost all of our unregistered shares are currently eligible for public resale under Rule 144. No prediction can be made as to the effect, if any, that sales of the shares included in this prospectus or the shares subject to Rule 144 sales will have on the market prices prevailing from time to time. Nevertheless, the possibility that substantial amounts of common stock may be sold in the public market may adversely affect prevailing market prices for our common stock and could impair our ability to raise capital through the sale of our equity securities

***Approximately 12,149,000 shares of our common stock were released from lock-up agreements on July 24, 2014, which will further increase the number of shares available for public resale.***

On July 24, 2013, our three largest shareholders entered into a lock-up agreement with us pursuant to which they agreed not to, directly or indirectly, offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, approximately 12,149,000 of their shares of common stock until July 24, 2014. On July 24, 2014, these lock-up agreements expired, and the holders of these shares were released from their contractual agreement not to publicly sell these shares. As a result, these 12,149,000 shares are now available for re-sale on the OTCQB market. The sudden release of a large number of these shares onto the market could have an adverse effect on the trading price of our stock.

***If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results. As a result, we could become subject to sanctions or investigations by regulatory authorities and/or stockholder litigation, which could harm our business and have an adverse effect on our stock price.***

As a public reporting company, we are subject to various regulatory requirements, including the Sarbanes-Oxley Act of 2002, which requires our management to assess and report on our internal controls over financial reporting. As a small company with few employees, we may not have sufficient personnel to properly conduct all of internal control procedures and activities that require segregation of powers and responsibilities. While we are attempting to remedy this possible internal control weakness, we may not be able to fully comply with the internal control requirements of the Sarbanes-Oxley Act of 2002, and future material weaknesses in our internal controls may arise. Material weaknesses in our internal controls could result in a loss of investor confidence in our financial reports, have an adverse effect on our stock price, and subject us to sanctions or investigation by regulatory authorities or stockholder litigation.

***Our board could issue additional series of preferred stock without stockholder approval with the effect of diluting existing stockholders and impairing their voting rights.***

Our articles of incorporation authorize the issuance of up to 50,000,000 shares of “blank check” preferred stock (of which only 17,000 have been designated as the Series A Preferred) with designations, rights and preferences as may be determined from time to time by our board of directors. Our board is empowered, without stockholder approval, to issue one or more series of preferred stock with dividend, liquidation, conversion, voting or other rights which could dilute the interest of, or impair the voting power of, our common stockholders. The issuance of a series of preferred stock could be used as a method of discouraging, delaying or preventing a change in control. For example, it would be possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to effect a change in control of our company.

***We do not anticipate paying cash dividends for the foreseeable future, and therefore investors should not buy our stock if they wish to receive cash dividends.***

We have never declared or paid any cash dividends or distributions on our common stock. We currently intend to retain any future earnings to support operations and to finance expansion and, therefore, we do not anticipate paying any cash dividends on our common stock in the foreseeable future.

***State securities laws of certain states may restrict the ability of Selling Stockholders in those states to re-sell their shares of common stock.***

We have not registered the shares of common stock offered hereby under the securities laws of any state. In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with. The securities laws of certain states may limit the transferability of the shares included in this prospectus.

#### **FORWARD-LOOKING STATEMENTS**

This prospectus contains forward-looking statements, which reflect the views of our management with respect to future events and financial performance. These forward-looking statements are subject to a number of uncertainties and other factors that could cause actual results to differ materially from such statements. Forward-looking statements are identified by words such as “anticipates,” “believes,” “estimates,” “expects,” “intends,” “plans,” “projects,” “targets” and similar expressions. Readers are cautioned not to place undue reliance on these forward-looking statements, which are based on the information available to management at this time and which speak only as of this date. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. For a discussion of some of the factors that may cause actual results to differ materially from those suggested by the forward-looking statements, please read carefully the information under “Risk Factors” beginning on page 4.

The identification in this document of factors that may affect future performance and the accuracy of forward-looking statements is meant to be illustrative and by no means exhaustive. All forward-looking statements should be evaluated with the understanding of their inherent uncertainty. You may rely only on the information contained in this prospectus.

We have not authorized anyone to provide information different from that contained in this prospectus. Neither the delivery of this prospectus nor the sale of common stock means that information contained in this prospectus is correct after the date of this prospectus. This prospectus is not an offer to sell or solicitation of an offer to buy these securities in any circumstances under which the offer or solicitation is unlawful.

## USE OF PROCEEDS

We are registering these shares pursuant to the registration rights granted to the investors and placement agents in the Private Placement. As a result, we will not receive any proceeds from the sale of the common stock by the selling stockholders pursuant to this prospectus. All proceeds from the sale of the shares will be for the account of the selling stockholders. The selling stockholders may sell these shares in the over-the-counter market or otherwise, at market prices prevailing at the time of sale, at prices related to the prevailing market price, or at negotiated prices. However, we may receive proceeds upon the cash exercise of the common stock purchase warrant, the underlying shares of which are offered by this prospectus. If all of the warrants issued in connection with the Private Placement are exercised at the initial exercise price of \$2.50 per share (which exercise price is subject to adjustment under customary anti-dilution protections), then we will receive gross proceeds of approximately \$30,930,000. As of the date of this prospectus, selling stockholders have exercised warrants to purchase a total of 1,098,892 shares, for which we have received a total purchase price of \$3,099,835. We currently expect that any additional proceeds we receive from the exercise of warrants will be used for working capital and general corporate purposes. No assurance can be given, however, that all or any portion of the remaining outstanding warrants will be exercised.

## BUSINESS

### Overview

Lion Biotechnologies, Inc. is an emerging biotechnology company focused on developing and commercializing adoptive cell therapy (ACT) using autologous tumor infiltrating lymphocytes (TILs) for the treatment of metastatic melanoma and other solid tumors. ACT utilizes T-cells harvested from a patient to treat cancer in that patient. TILs, a kind of anti-tumor T-cell that are naturally present in a patient's tumors, are collected from individual patient tumor samples. The TILs are then activated and substantially expanded in number *ex vivo* and then infused back into the patient to fight their tumor cells.

ACT using TILs was developed by Dr. Steven Rosenberg, Chief of Surgery at the National Cancer Institute (NCI). We have (i) acquired a worldwide, non-exclusive license for various adoptive cell therapy technologies from the National Institutes of Health (NIH), an agency of the United States Public Health Service within the Department of Health and Human Services, and (ii) entered into a Cooperative Research and Development Agreement (CRADA) with the NCI, pursuant to which we currently are support the *in vitro* development of improved methods for the generation and selection of TILs, are develop approaches for large-scale production of TILs, and intend to conduct clinical trials using these improved methods of generating TILs for the treatment of metastatic melanoma. Currently, we are also in discussions with the NIH to license (i) additional indications under the existing NIH license and (ii) rights to next generation T-cell technology that may have higher potency, persist over a longer period of time, require fewer cells, and have a lower manufacturing cost. However, no assurance can be given that we will be able to license these additional rights.

TIL therapy is presently available as a physician-sponsored investigational therapy for the treatment of metastatic melanoma at several institutions, including the NCI, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer & Research Institute. Although we are sponsoring development of TILs at NCI and work closely with some of the physicians involved in developing these technologies at other institutions, we are not direct sponsors of the clinical trials at these other institutions. Clinical trials in small patient populations at different institutions show that durable response rates can be observed in approximately half of metastatic melanoma patients treated with TIL therapy. Complete responses can be seen in about 10% of metastatic melanoma patients treated with TILs. Objective response occurs when there is a complete remission or a partial remission, as measured by standard criteria. Generally, a complete remission requires a complete disappearance of all detectable evidence of disease, and a partial remission typically requires at least approximately 50% regression of measurable disease, without new sites of disease.

Manufacturing TILs is currently labor intensive, costly, and time-consuming, which has limited its widespread application. We have entered into a Manufacturing Services Agreement with Lonza Walkersville, Inc. (Lonza) pursuant to which Lonza has agreed to manufacture, package, ship and handle quality assurance and quality control of our TIL therapy. Lonza has commenced developing a commercial-scale manufacturing process for the TIL therapy. Our goal is to develop and establish a manufacturing process for the large-scale production of TILs that is in accord with current Good Manufacturing Practices (cGMP). By providing centralized manufacturing, we believe TIL therapy can be made more widely available to a larger number of cancer patients.

Over the past three years, we have worked with NCI to develop new systems for large scale manufacturing of TILs as well as to transfer the manufacturing process to Lonza for further development. In addition, the NCI, under our CRADA, is currently continuing to test TILs in metastatic melanoma patients either alone, or in combination with other therapeutic agents. This work has been supported by research payments of \$3 million that we have made to the NCI over the last three years under the CRADA. In July 2014 we also entered into a clinical trial grant agreement with Moffitt Cancer Center to expand an ongoing Phase 1 study of TILs combined with the checkpoint inhibitor ipilimumab (Yervoy) in patients with metastatic melanoma.

Our goal is to initiate a company-sponsored Phase 2 clinical trial early in 2015 to evaluate the the safety and efficacy of the manufacturing and testing process that Lonza is establishing at its facilities for us. We expect it will take approximately 12-18 months and will cost at least \$3-4 million to develop the more robust manufacturing process that is needed before we can initiate a Phase 3 clinical trial in 2016. Initiation of this Phase 3 clinical trial is dependent on the FDA's agreement with our clinical trial plans as well as validation of our manufacturing and testing processes. Since we completed a \$23.3 million private placement in November 2013, we believe that we have sufficient funds to reach the Phase 3 trial stage. The cost of a Phase 3 registration trial, however, is estimated to be at between \$30-60 million, will require us to treat 300 or more patients and will take at least three years to complete. Although we believe that we have sufficient capital to fund our anticipated research and development and working capital needs for at least the next 12 months, we do not have sufficient funds for the Phase 3 registration trial and, therefore, will have to raise additional capital to complete the trial.

In July 2014 we leased a 5,100 square foot research and development facility in Tampa, Florida, that is part of the University of South Florida research park. The new space currently is being developed and furnished for our research needs and is expected to be available for use by the end of October 2014. The Tampa research facility will operate under the supervision of our Chief Scientific Officer and will employ up to approximately ten full-time or part-time employees.

We are a development stage company that out-sources much of its research and development activities. We currently have only nine full time employees. To date, we have not generated any revenues. From the date of our inception through June 30, 2014, we have incurred net losses of \$68,897,000.

## ***Company History—Corporate Restructuring***

We were incorporated in the State of Nevada on September 17, 2007. Until March 2010, we were an inactive company known as Freight Management Corp. On March 15, 2010, we acquired the rights, title and interest to certain assets, including certain patents, patent applications, materials, and know-how, related to the development and commercialization of biotechnology drugs, and then commenced developing anti-cancer drugs based primarily on anti-CD55+ antibody (the “Anti-CD55+ Antibody Program”). However, test results from the studies performed for us as part of the Anti-CD55+ Antibody Program failed to meet the pre-clinical development endpoints, and in October 2011 our Board of Directors abandoned the Anti-CD55+ Antibody Program.

In 2011 we identified an opportunity to develop and commercialize adoptive cell therapy using autologous tumor infiltrating lymphocytes for the treatment of Stage IV metastatic melanoma and other cancers based on technologies that we could license from the National Institutes of Health, an agency of the United States Public Health Service within the Department of Health and Human Services (“NIH”). Accordingly, in October 2011, we entered into a Patent License Agreement (the “License Agreement”) with the NIH for a non-exclusive worldwide right and license to develop and manufacture certain proprietary adoptive cell therapy using autologous tumor infiltrating lymphocytes for the treatment of certain cancers. The intellectual property subject to the License Agreement is covered by various patents and patent applications.

After entering into the License Agreement, our goal was to raise additional funding to develop our new products and establish our new business. Early in 2013 we determined that, in order to attract new investors it was necessary to (i) restructure our prior debt and equity issuances and (ii) hire new management. Accordingly, on May 22, 2013 we completed a restructuring of our unregistered debt and equity securities (the “Restructuring”) and raised \$1.25 million. We also replaced most of our officers and directors. To effect the Restructuring, we entered into an exchange agreement (the “Exchange Agreement”) and other agreements pursuant to which (i) most of the outstanding promissory notes and other debt instruments that we issued to investors were converted into shares of common stock; (ii) substantially all of outstanding warrants to purchase shares of capital stock were exchanged for shares of common stock; (iii) certain investors who invested in our prior private equity offerings (the “Prior PIPE Transactions”) purchased additional shares of common stock; and (iv) certain investors who purchased shares of common stock in the Restructuring received additional shares of common stock, for no additional consideration.

Under the Exchange Agreement, creditors holding (i) an aggregate of approximately \$7.2 million (including accrued interest and penalties) of the senior secured notes that we issued on July 27, 2011 (the “Senior Secured Notes”), (ii) an aggregate of approximately \$1.7 million (including accrued interest and penalties) of bridge notes issued May 7, 2012 and September 12, 2012 (the “12% Secured Notes”), and (iii) an aggregate of approximately \$0.3 million in other outstanding debt (the Senior Secured Notes, 12% Secured Notes and other debt is herein collectively referred to as the “Debt”) converted the Debt into shares of common stock at a conversion price of \$1.00 per share. In addition, certain creditors and other warrant holders who collectively owned warrants to purchase 40,800 shares of our common stock, exchanged their warrants for shares of common stock. Under the Exchange Agreement, we also sold 250,000 shares of common stock for \$250,000 (i.e. at a purchase price of \$1.00 per share). Collectively, we issued a total of 9,558,441 shares of common stock under the Exchange Agreement.

In order to raise additional working capital, in connection with the Restructuring, we also sold additional shares of our common stock, at a price of \$1.00 per share, to certain investors who had previously purchased common stock and warrants from us in the Prior PIPE Transactions. In order to induce those investors to purchase a certain amount of shares, for no additional consideration we issued to each investor the number of shares of common stock that the investor would have received in the Prior PIPE Transactions had the price per share of common stock in the Prior PIPE Transactions been \$1.00 per share. A total of 3,355,068 shares of common stock were issued in these transactions, and an aggregate of \$1,100,000 of cash was received by us from these sales. Finally, security holders holding warrants to purchase 81,934 shares of common stock cancelled their warrants and received one share of common stock for each share of common stock underlying the warrants.

The effect of the Exchange Agreement transactions and the sale of shares to the investors in the Prior PIPE Transactions was to (i) extinguish all outstanding secured and unsecured promissory notes (representing liabilities of approximately \$8,373,000 in the aggregate), (ii) raise a total of \$1,250,000 of cash from the sale of the securities, and (iii) extinguish the then outstanding warrants for all but 1,000 shares, including the anti-dilution provisions contained therein. The shares of common stock that we issued in the foregoing transactions do provided for new limited anti-dilution protection for stock issuances for less than \$1.00 per share. The foregoing anti-dilution provision expired upon the completion of the Private Placement.

On May 20, 2013, Martin Schroeder resigned from the Board of Directors. In connection with the Restructuring, on May 22, 2013, Anthony Cataldo, Michael Handelman and William Andrews resigned from our Board of Directors. Finally, on May 24, 2013, our stockholders removed Dr. L. Stephen Coles from the Board and elected Paul Kessler to serve as an additional director on the Board. Mr. Kessler is a director of Bristol Investment Fund, Ltd. and a manager of Bristol Capital Advisors, LLC who, collectively, hold approximately 14.6% of our currently outstanding shares of common stock.

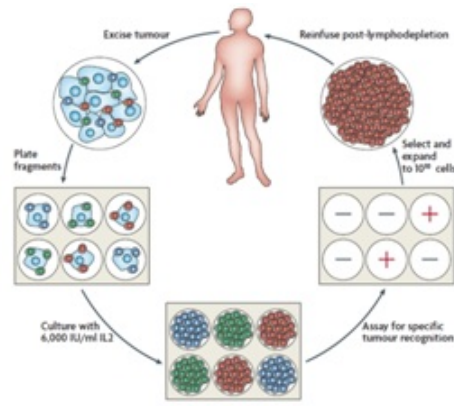
After the completion of the foregoing transactions, our Board continued its search for a new, experienced Chief Executive Officer and for new directors. In particular, we continued our negotiations with Dr. Manish Singh, the principal executive officer and stockholder of Lion Biotechnologies, Inc., a Delaware corporation ("Lion Delaware"). On July 24, 2013, we entered into an Agreement and Plan of Merger with Lion Delaware, and Genesis Biopharma Sub, Inc., our newly formed Delaware subsidiary ("Merger Sub"), and thereby acquired Lion Delaware (the "Merger"). The purpose of the Merger was to acquire access to technical and managerial resources to build our current and future products, which we believed would enhance or future operations and enable us to obtain additional funding. In the Merger, Lion Delaware's stockholders received, in exchange for all of their issued and outstanding shares of common stock, an aggregate of 1,340,000 shares of common stock, as well as the ability to receive an additional 1,350,000 shares of common stock upon the achievement of certain milestones related to our financial performance and position. The Private Placement satisfied one of the performance targets and the recent trading activity of our common stock satisfied the second condition. Accordingly, we have now issued all 1,350,000 additional shares of our common stock to the former owners of Lion Delaware. As part of the Merger, Dr. Manish Singh entered into an employment agreement with us whereby we appointed him as our Chief Executive Officer and Chairman of the Board of Directors. We also agreed to reconstitute our Board of Directors by appointing Jay Venkatesan and Sanford J. Hillsberg to replace David Voyticky and Paul Kessler as directors on our Board. Those appointments and resignations became effective on September 3, 2013, and Mr. Hillsberg and Dr. Venkatesan are now directors on our Board.

#### ***Reverse Stock Split, Change of Corporate Name, Increase in Authorized Common Stock, and Creation of Blank Check Preferred Stock***

In September 2013, we amended and restated our articles of incorporation to (i) effect a reverse stock split (pro-rata reduction of outstanding shares) of our common stock at a reverse split ratio of 1-for-100, (ii) increase (after the reverse stock split) the number of our authorized number of shares of common stock to 150,000,000 shares, (iii) authorize the issuance of 50,000,000 shares of "blank check" preferred stock, \$0.001 par value per share, (iv) the change in the name of this company to "Lion Biotechnologies, Inc.", and (v) add indemnification provisions for directors and limits on the personal liability of officers and members of our Board.

#### ***Technology and Proposed Products; Regulatory Strategy***

Patients undergoing TIL therapy must have their tumors surgically resected and then shipped to a designated manufacturing facility, where the TILs are isolated, activated, and expanded to billions *in vitro*, away from cancer's immune-suppressing effects. These highly activated, potent TILs are then infused back into the patient, who has been preconditioned to remove all suppressive influences. The TILs are infused into the patient with interleukin-2 (IL-2) to stimulate the immune system.



Results from early stage clinical trials conducted in small patient populations at various institutions, including the NCI, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer & Research Institute, show that about half of metastatic melanoma patients refractory to other treatments and treated with TILs experienced an objective response, showing tumor shrinkage. Complete responses, where all of the tumor was eradicated, occurred in approximately 10% of those patients. Responses were durable, lasting as long as 6.9 years and were observed at multiple sites where metastasis was present.

With TIL therapy, after the patient's metastatic melanoma tumor has been surgically resected at the patient's hospital, the tumor will be sent to our designated manufacturing facility for manufacturing of TILs. The autologous TILs are then isolated from the patient's metastatic melanoma tumor. This population of autologous TILs is then multiplied *ex vivo* to greater than 20-50 billion TILs under conditions that overcome the immunosuppressive influences that exist in the cancer patient due to the presence of their cancer. Six to eight days prior to infusion of the TILs, the patient returns to the hospital and is administered a nonmyeloablative chemotherapeutic regimen to remove any lymphoid and myeloid suppressor cells present in the patient's immune system. Once the TILs have been multiplied to a sufficient number *ex vivo*, and after the patient has completed the nonmyeloablative chemotherapeutic regimen, the TILs are infused into the patient along with a high dose of interleukin-2 (IL-2), a protein that stimulates the immune system.

Typically, the patient remains in the hospital for 8-10 days after the TILs infusion while his immune system rebuilds itself. Based on published results of Phase 1 and 2 clinical studies by the NCI, the MD Anderson Cancer Center and at the Moffitt Cancer Center, for patients with metastatic melanoma who are refractory to all other treatments, about 50% of such patients according to RECIST criteria ("Response Evaluation Criteria in Solid Tumors" for clinical trials where diagnostic imaging such as a CT scan is used to determine tumor presence, absence, shrinkage or growth) experience an objective response showing significant tumor shrinkage following the ACT using autologous TILs. In addition, based on results from the same institutions, about 10% of patients experience a complete response. A significant number of responses in these trials were durable, lasting several years, and could be seen in all organ sites where metastasis was present, including in the brain.

Our first product candidate, TILs for the treatment of melanoma, is based on the clinical development and trials conducted at the NCI, MD Anderson Cancer Center, the H. Lee Moffitt Cancer & Research Institute, and Sheba Hospital in Israel. As part of our agreements with the NCI/NIH, we acquired rights to develop TILs for melanoma, ovarian, breast and colon cancers by in-licensing the patents covering these technologies on a non-exclusive basis. Our goal is to initially focus on metastatic melanoma, but to also expand the development of TIL therapy to treat these other cancers.

In addition, we entered into a cooperative research and development agreement (the CRADA) with the NCI to develop large scale methods for manufacturing TILs and to conduct additional melanoma trials. The NCI has been conducting this research and development under our agreement for almost three years, and this research and development is still currently on-going. In connection with developing a large scale TILs manufacturing capability, we have transferred our manufacturing process to Lonza Walkersville, Inc. (see, "Manufacturing" below) for further development and to support our future large scale trials. We plan to file an investigational new drug application (IND) with the FDA by the end of 2014 and to initiate a Phase 2 clinical trial early in 2015 in order to evaluate Lonza's manufacturing process and to determine whether clinical responses can be observed. Thereafter, our goal is to initiate a Phase 3 trial in 2016 in second line metastatic melanoma (those refractory to existing treatments) patients. However, before we can initiate a Phase 3 trial, we will first have to develop our manufacturing process in a manner that meets the FDA's guidelines for manufacturing cell and biologics products, we will have to enroll up to 10 medical institutions at which the trial will be conducted (and obtain the approval of the Institutional Review Boards at these institutions), and we will also have to get the FDA's approval for our clinical plans under an IND. See, "Governmental Regulation," below.

The current TILs manufacturing process is expensive and cumbersome. Our goal is to reduce the cost of manufacturing by eliminating some of the more laborious steps in the process, by reducing usage of certain reagents used to grow TILs, and by increasing the productivity of our culture vessels. We anticipate that it will cost about \$3-4 million, and will take about 12-18 months to develop the enhanced TILs manufacturing process. We believe that we have sufficient funds from the Private Placement to complete this development work. Our goal also is to develop and commercialize new technologies to enhance TIL production from tumors and to develop next-generation TIL expansion technologies for melanoma. In connection with these goals, in July 2014 we received an exclusive, world-wide license to Moffitt Cancer Center's rights in and to two patent-pending technologies related to methods for improving tumor-infiltrating lymphocytes for adoptive cell therapy, and we are establishing a new research facility at the Moffitt Cancer Center to pursue these goals.

Once we have developed and validated our enhanced TILs manufacturing process, we plan to initiate a meeting with FDA for clearance of a proposed large Phase 3 trial. Our goal is to hold these FDA meetings in the next 12-18 months. We currently do not have any approved INDs as all prior TIL trials were conducted under physician sponsored trials by various medical centers using the same NIH technology for production and testing of TILs that was licensed to us. We previously met with the FDA in October 2012. At that meeting, the FDA provided us with certain guidelines for the development of a manufacturing process and for the Phase 3 trial design, which guidelines we believe we can meet in the next 12-18 months. The Phase 3 registration clinical trial is designed to treat metastatic melanoma patients refractory to other treatments with TIL therapy. Subject to receiving FDA clearance for this trial, enrollment for the Phase 3 trial is expected to begin in 2016. The total cost for receiving the FDA clearance, including completing the development and the validation of our manufacturing process, is expected to be about \$3-5 million. Based on the funds that we have available as a result of the Private Placement, we believe that we have sufficient capital to fund the FDA clearance approval process.

The cost of a Phase 3 registration trial is estimated to be at least \$30-35 million, and will require us to treat 300 or more patients and will take at least three years to complete. We do not have sufficient funds to complete the Phase 3 registration trial and, therefore, will have to raise additional capital to complete the trial. Based on our assumption that the Phase 3 trial will be initiated in 2015 and that only one Phase 3 trial will be required, we expect that we will be ready to file a biologics license application (BLA) in 2019 for the commercialization of TILs for melanoma. We currently estimate that we will expend at least \$75-100 million in clinical trial, product manufacturing and general operating costs before such time, if ever, as our product is commercially available. We will have to raise this additional capital over the next five years in order to be able to fund the development of our product to the point of commercialization.



We also plan to conduct trials to treat metastatic melanoma in the frontline setting, combining TILs with CTLA-4 antibodies, such as ipilimumab (Yervoy®), BRAF inhibitors, such as vemurafenib (Zelboraf®), or PD-1/PD-L1 antibodies, such as nivolumab or pembrolizumab. Some of these trials have already been initiated at NCI and Moffitt medical centers, such as TILs with Ipilimumab at Moffitt and TILs with vemurafenib at NCI. Although these trials use the TILs technology licensed to us by NIH, we are not the official sponsors of these trials. Nevertheless, the clinical data from these other trials are expected to be useful in advancing the development of our products in frontline combination settings. In order to generate clinical data on the combined use of TILs with ipilimumab (Yervoy®), in July 2014 we entered into a clinical trial grant agreement with Moffitt Cancer Center to expand an ongoing Phase 1 study of TILs combined with ipilimumab in patients with metastatic melanoma. Under the agreement, we will give Moffitt funding to enroll an additional ten qualified patients into the clinical trial, bringing the total number of subjects to 20. The primary objective of the trial is to evaluate the safety and preliminary efficacy of administering ipilimumab in combination with TILs as a first-line therapy for patients with metastatic melanoma. Secondary outcome measures include overall response rate, or tumor shrinkage, and progression-free survival. Since ipilimumab and Zelboraf® are already approved products, we do not expect to have to obtain any additional approvals from their manufacturers. However, PD-1 antibodies such as Nivolumab or Pembrolizumab, may require additional agreements with the companies producing those products as these are currently in clinical trials and not available in the market. Under our CRADA with the NCI, a combination trial with BRAF inhibitor Vemurafenib and TILs has already been initiated at NCI. We expect to invest a total of \$3-4 million for these trials in the next two years in order to generate some clinical data as proof of principle prior to initiating any larger trials.

In addition to metastatic melanoma, our plan is to investigate and develop TIL therapy for the treatment of other cancers (such as cervical, lung, breast and other solid cancers) by funding exploratory pilot clinical trials under sponsored research agreements with various medical and research institutions. To date, we have not entered into any sponsored research agreements, and no assurance can be given if or when such pilot trials will begin.

### **Market Opportunity**

The initial indication for our TIL therapy will be for the treatment of metastatic melanoma. From 1975 to 2010, the incidence of melanoma tripled in the United States. The American Cancer Society estimates that about 76,100 new cases of melanoma will be diagnosed in the U.S. in 2014 and that approximately 9,710 Americans are expected to die of melanoma in the United States in 2014. It is estimated that approximately 8,000 new patients will be diagnosed with metastatic melanoma annually in the U.S. Patients with metastatic melanoma have a poor prognosis, with a 5-year survival rate of about 5%. Not all metastatic melanoma can receive TIL therapy because the metastatic nodule may not be suitable for resection, and not all resected lesions grow cells suitable for infusion. Accordingly, based on current estimates of the number of annual deaths due to metastatic melanoma, we believe that at least 3,000 to 5,000 metastatic melanoma patients, and possibly up to 7,000 patients, could be eligible for TIL therapy annually in the United States. We also believe that the number of metastatic melanoma patients suitable for TIL therapy outside the U.S. is approximately twice that of the U.S. However, the number of eligible patients may significantly increase worldwide if and when TIL therapy is approved. In addition to melanoma, TIL technology also may be applicable to treat other solid tumors. If TIL therapy can be used to treat additional indications, the market opportunity will be significantly larger.

### **Agreements Related To Intellectual Property**

#### Cooperative Research And Development Agreement (CRADA)

On August 5, 2011, we entered into a CRADA with the NIH and NCI. Under the terms of the five-year CRADA, we have been working with Dr. Rosenberg to further develop TIL therapies. Specifically, the purposes of the CRADA are to: (i) support *in vitro* development of improved methods for the generation and selection of TILs with anti-tumor reactivity from patients, (ii) develop approaches for large-scale production of TILs that are in accord with cGMP procedures suitable for use in treating patients, and (iii) conduct clinical trials using these improved methods of generating TILs as well as improved adoptive cell therapy patient preparative regimens.

Both the NCI and Lion Biotechnologies may provide personnel, services, facilities, equipment or other resources under the agreement. Under the terms of the CRADA, we will have an exclusive option to negotiate an exclusive license to any new inventions developed jointly or independently by NCI scientists during the course of the research project. The term of the CRADA is five years, but either party to the CRADA has the right to terminate the CRADA upon 60 day notice.

Under the CRADA, we are required to provide funds to Dr. Rosenberg, which funds may be used to acquire technical, statistical, and administrative support for the research activities, as well as to pay for supplies and travel expenses. Our obligation is to provide \$1,000,000 of funds annually under the CRADA, which amount is disbursed in quarterly installments of \$250,000. Dr. Rosenberg can allocate the funding between the various categories in support of the CRADA research as he sees fit. All payments required to be made under the CRADA to date have been made.

#### National Institutes Of Health License Agreement

Effective October 5, 2011, we entered into a Patent License Agreement (the "License Agreement") with the NIH. Pursuant to the License Agreement, the NIH granted us a non-exclusive worldwide right and license to develop and manufacture autologous TILs for the treatment of metastatic melanoma and three other cancers. The intellectual property subject to the License Agreement is covered by patents and patent applications, consisting of issued and pending patent applications in the United States, as well as foreign patents and patent applications as counterparts of U.S. patents/patent applications, including Europe, Australia, and Canada. We were also granted limited rights to sublicense the intellectual property subject to the License Agreement. The License Agreement will expire on a product-by-product basis upon the expiration of the subject patent rights.

The subject matter claimed in the patents and patent applications that were licensed by us under the License Agreement generally relates to:

- Methods to identify and isolate T-cells and TILs in particular
- *Ex vivo* methods to grow T-cells and TILs in particular
- Methods to use T-cells and TILs in particular as therapeutic agents for the treatment of metastatic cancers, including but not limited to metastatic melanoma

Under the License Agreement, we are responsible for paying the patent maintenance costs. The annual maintenance cost for the current elements of the portfolio will range from \$50,000 to \$100,000. The licensed issued U.S. patents will expire at various times through 2026, assuming that all maintenance fees are timely paid.

Lion Biotechnologies has the right to terminate the License Agreement in any country or surrender certain unwanted patents/patent applications on 60 day notice, and NIH has the right to terminate the agreement if the company is in material breach, and the breach is not cured within a specified cure period, upon certain bankruptcy and insolvency events, or if the company fails to comply with or achieve certain development timelines as set forth in the License Agreement.

In consideration for the rights granted by the License Agreement, we paid the NIH a total of \$723,000 of upfront licensing fees and expense reimbursements following the execution of the License Agreement. We are also required to pay a 6% royalty on annual net sales for all products covered by the License Agreement, as well as make minimum annual royalty payments, which minimum royalties will be credited against any earned royalties due for sales in that year.

In addition to the up-front payment and on-going royalty payments, we are also obligated to make lump sum benchmark milestone payments upon the achievement of certain clinical and regulatory milestones for each of the four indications (melanoma, breast cancer, ovarian cancer, and colorectal cancer). We initially intend to focus our efforts on the development of licensed products in the metastatic melanoma field of use. If we achieve all benchmarks for metastatic melanoma, up to and including the product's first commercial sale in the United States and any foreign country, the total amount of such benchmark payments will be \$6,050,000. If we achieve all benchmarks for all four licensed indications, the aggregate amount of benchmark payments that we will have to make to NIH will be \$36,300,000.

We have recently been in discussions with the NIH to surrender to the NIH some of the unnecessary patents/patent applications included in the License Agreement and to license additional technologies from the NIH. These additional licensed rights would cover technology for potentially producing cells enriched for higher potency that have a lower cost of goods and a shorter manufacturing process. No assurance can be given that we will be able to obtain a license to the next generation technologies.

### Moffitt Cancer Center Exclusive License Agreement.

On July 21, 2014, we entered into an Exclusive License Agreement (the “Moffitt License Agreement”), effective as of June 28, 2014, with the H. Lee Moffitt Cancer Center and Research Institute, Inc. (“Moffitt”) under which we received an exclusive, world-wide license to Moffitt’s rights in and to two provisional patent-pending technologies (filed under “Compositions and Methods for Improving Tumor-Infiltrating Lymphocytes for Adoptive Cell Therapy”) related to methods for improving tumor-infiltrating lymphocytes for adoptive cell therapy. The license covers the application of this technology metastatic melanoma and other tumor types, including triple-negative breast cancer, non-small cell lung cancer and other tumors that historically have been difficult to treat. Pursuant to the Moffitt License Agreement, we agreed to pay an upfront licensing fee, payable within 30 days of the effective date of the Moffitt License Agreement, and a patent issuance fee payable upon the issuance of the first U.S. patent covering the subject technology. In addition, we have agreed to pay milestone license fees upon completion of specified milestones, customary royalties based on a specified percentage of net sales (which percentage is in the low single digits) and sublicensing payments, as applicable, and annual minimum royalties beginning with the first sale of products based on the licensed technologies, which minimum royalties will be credited against the percentage royalty payments otherwise payable in that year. We will also be responsible for all costs associated with the preparation, filing, maintenance and prosecution of the patent applications and patents covered by the Moffitt License Agreement related to the treatment of any cancers in the United States, Europe and Japan and in other countries selected that we and Moffitt agreed to.

### ***Manufacturing***

Lion Biotechnologies currently has no capability to manufacture supplies of any product and relies on third-party manufacturers to produce materials as needed for research and clinical trials.

On June 21, 2011, we entered into a process development and scale-up consulting agreement with Lonza Walkersville, Inc. (Lonza), Lonza’s U.S. production facility, relating to the manufacture of TILs. Lonza is a leading international supplier to the pharmaceutical, healthcare and life science industries. Under the terms of the Lonza consulting agreement, Dr. Rosenberg and his colleagues at the NCI transferred the standard operating procedures used to manufacture the TILs to Lonza for the purpose of developing manufacturing procedures and protocols for the manufacture of TILs for clinical trials and commercial sales.

In December 2011, we entered into a five-year Manufacturing Services Agreement with Lonza. Under the Manufacturing Services Agreement, Lonza agreed to manufacture, package, ship and handle quality assurance and quality control of the TIL therapy products. Under the Manufacturing Services Agreement, we will be the owners of all intellectual property that is developed, conceived, invented or reduced to practice by Lonza, other than intellectual property that is generally applicable to the development or manufacture of chemical or biological products, or intellectual property that improves Lonza’s previously owned intellectual property.

All future Lonza services will be provided under separate statements of work agreed to enter into from time to time. To date, we have asked Lonza to provide certain services related to optimizing the manufacturing process for TIL therapy products. In June 2014 we commenced transferring our TIL manufacturing protocols from the NCI to Lonza and have engaged Lonza to commence setting up a centralized TIL manufacturing center for our planned multicenter, pivotal clinical trials. The fees and costs of Lonza’s services under the Manufacturing Services Agreement depend on each statement of work.

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

Expenditures for research and development activities related to continuing operations were \$1,656,000 and \$1,329,000, for the years ended December 31, 2012 and 2013, respectively. For further information regarding our research and development activities, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations” below.

Expenditures for research and development activities related to continuing operations were \$1,656,000 and \$1,329,000, for the years ended December 31, 2012 and 2013, respectively. For further information regarding our research and development activities, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations” below.

In July 2014 we leased a 5,100 square foot facility in Tampa, Florida. The new facility is part of the University of South Florida research park and will be used as our research and development facilities. The new space currently is being developed and furnished for our research needs, but is expected to be available for use by the end of October 2014. The Tampa research facility will operate under the supervision of our Chief Scientific Officer and will employ up to approximately ten full-time or part-time employees. As of the date of this prospectus, we have entered into employment agreements with four full-time scientists and one full-time research assistant, all of whom will work at the Tampa research facility. The key research activities at the Tampa research laboratory are expected to be directed at, among other, the optimization of current T-cell expansion protocols for out-scaling of current and future melanoma TIL clinical trials (INDs), the development of next-generation TIL expansion technologies for melanoma, the development of *ex vivo* cell expansion protocols for TIL from other solid tumor indications, generating TILs to optimize clinical responses, and developing predictive biomarkers in TIL-treated patients.

Our currently projected expenditures for the remainder of 2014 and 2015 include approximately \$5 to \$7 million for research and development. The actual cost of our programs could differ significantly from our current projections if we change our planned development process. In the event that actual costs of our clinical program, or any of our other ongoing research activities, are significantly higher than our current estimates, we may be required to significantly modify our planned level of operations.

### **Competition**

The pharmaceutical and biopharmaceutical industry is characterized by intense competition and rapid and significant technological changes and advancements. Many companies, research institutions and universities are doing research and development work in a number of areas similar to those that the company focuses on that could lead to the development of new products which could compete with and be superior to our product candidates.

Competitors may have substantially greater financial, technical, manufacturing, marketing, distribution and other resources. A number of these companies may have or may develop technologies for developing products for treating various diseases that could be superior. Technological developments in the pharmaceutical and biopharmaceutical and related fields can occur at a rapid rate, and competition can intensify as advances in these fields are made. Accordingly, we will be required to continue to devote substantial resources and efforts to research and development activities in order to potentially achieve and maintain a competitive position. Products that are developed may become obsolete before we are able to market them. Competitors may have significantly more experience in undertaking preclinical testing and human clinical trials with new or improved therapeutic products and obtaining regulatory approvals of such products. A number of these companies already market and may be in advanced phases of clinical testing of various drugs or therapies that may compete with our lead product candidate or any future product candidates. Competitors may develop or commercialize products more rapidly than we do or with significant advantages over any products we develop. Competitors may therefore be more successful in commercializing their products, which could adversely affect our business.

Potential competitors in the market for treating metastatic melanoma will be companies, such as Bristol-Myers Squibb, Roche/Genentech, Merck, Amgen, Pfizer, and GlaxoSmithKline, which already have products on the market or in development. Other companies, such as Novartis, Celgene, Kite Pharmaceuticals, and Adaptimmune, which are focused on T cell therapies technologies to treat cancer, may also be competitors.

In addition to other companies, colleges, universities, governmental agencies and other public and private research organizations are becoming more active in seeking patent protection and licensing arrangements to collect royalties for use of technologies that have been developed, some of which may be directly competitive with our current or future product candidates. The governments of a number of foreign countries are aggressively investing in cellular therapy research and promoting such research by public and private institutions within those countries. These domestic and foreign institutions and governmental agencies, along with pharmaceutical and specialized biotechnology companies, can be expected to compete.

Our competitive position may be significantly impacted by the following factors, among others:

- ability to obtain FDA marketing approval for products on a timely basis
- level of acceptance of products by physicians compared competing products
- ability to manufacture products on a commercial scale to meet demand
- effectiveness of sales and marketing efforts
- ability to secure reimbursement for products
- price of products relative to competing products or therapies
- ability to recruit and retain appropriate management and scientific personnel
- ability to develop a commercial scale research and development, manufacturing and marketing infrastructure either independently or with strategic partners

### ***Government Regulation***

The United States and other developed countries extensively regulate the preclinical and clinical testing, manufacturing, labeling, storage, record-keeping, advertising, promotion, export, marketing and distribution of drugs and biologic products. The United States Food and Drug Administration, under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and other federal statutes and regulations, regulates pharmaceutical and biologic products.

We currently do not have any products that have been approved by the FDA for commercial use. To obtain approval of our product candidates from the FDA, we must, among other requirements, submit data supporting safety and efficacy for the intended indication as well as detailed information on the manufacture and composition of the product candidate. In most cases, this will require extensive laboratory tests and preclinical and clinical trials. The collection of these data, as well as the preparation of applications for review by the FDA involve significant time and expense. The FDA also may require post-marketing testing to monitor the safety and efficacy of approved products or place conditions on any approvals that could restrict the therapeutic claims and commercial applications of these products. Regulatory authorities may withdraw product approvals if we fail to comply with regulatory standards or if we encounter problems at any time following initial marketing of our products.

The first stage of the FDA approval process for a new biologic or drug involves completion of preclinical studies and the submission of the results of these studies to the FDA. This data, together with proposed clinical protocols, manufacturing information, analytical data and other information submitted to the FDA, in an investigational new drug application (IND), must become effective before human clinical trials may commence. Preclinical studies generally involve FDA regulated laboratory evaluation of product characteristics and animal studies to assess the efficacy and safety of the product candidate.

We have not yet submitted an IND to support our product candidates. However, there are at least five currently effective INDs for the study of TILs in various clinical trials at the NCI, MD Anderson Cancer Center, and the H. Lee Moffitt Cancer & Research Institute. Although none of these current trials are sponsored by us, they all use products and manufacturing processes that are similar to ours. We expect to be able to use the preclinical and clinical data from these INDs to support the IND we intend to submit to the FDA in 2014 in connection with a Phase 2 trial and the Phase 3 IND we plan to file by the end of 2015 to support our proposed Phase 3 trial that is planned for 2016.

After the IND becomes effective, a company may commence human clinical trials. These are typically conducted in three sequential phases, but the phases may overlap. Phase 1 trials consist of testing of the product candidate in a small number of patients or healthy volunteers, primarily for safety at one or more doses. Phase 1 trials in cancer are often conducted with patients who are not healthy and who have end-stage or metastatic cancer. Phase 2 trials, in addition to safety, evaluate the efficacy of the product candidate in a patient population somewhat larger than Phase 1 trials. Phase 3 trials typically involve additional testing for safety and clinical efficacy in an expanded population at multiple test sites. A company must submit to the FDA a clinical protocol, accompanied by the approval of the Institutional Review Boards at the institutions participating in the trials, prior to commencement of each clinical trial.

Since there already are other effective INDs for the study of TILs as a therapy for melanoma, and since TILs have been tested at various medical institutions under physician sponsored trials, we do not expect that the FDA will require us to duplicate those prior Phase 1 or Phase 2 studies. Accordingly, we currently anticipate that the FDA will authorize us to initiate a Phase 3 study directly, irrespective of whether we conduct our currently planned Phase 2 trial. The Phase 3 trial that we anticipate will be necessary will be substantial and may require participation from 10 or more medical centers. Accordingly, in addition to obtaining the FDA's approval, we will also have to obtain the approval from the Institutional Review Boards of these institutions in order to conduct the full Phase 3 trial.

To obtain FDA marketing authorization, a company must submit to the FDA the results of the preclinical and clinical testing, together with, among other things, detailed information on the manufacture and composition of the product candidate, in the form of a new drug application (NDA) or, in the case of a biologic, a biologics license application (BLA).

The amount of time taken by the FDA for approval of an NDA or BLA will depend upon a number of factors, including whether the product candidate has received priority review, the quality of the submission and studies presented, the potential contribution that the compound will make in improving the treatment of the disease in question, and the workload at the FDA. The FDA has committed to reviewing standard BLAs in 10 months and priority BLAs in six months, but the actual time it takes to review any BLA that we may file could be substantially longer. Using the FDA's timing guidelines, we expect that it will take at least 4-5 years from commencement of our Phase 3 trial to obtain the approval of our first product candidate under a BLA. Since we anticipate that it will require more funds than we have to complete this process, we will have to obtain this additional funding over the next five years before we will have a commercial product.

The FDA may, in some cases, confer upon an investigational product the status of a fast track product. A fast track product is defined as a new drug or biologic intended for the treatment of a serious or life-threatening condition that demonstrates the potential to address unmet medical needs for this condition. The FDA can base approval of an NDA or BLA for a fast track product on an effect on a surrogate endpoint, or on another endpoint that is reasonably likely to predict clinical benefit. If a preliminary review of clinical data suggests that a fast track product may be effective, the FDA may initiate review of entire sections of a marketing application for a fast track product before the sponsor completes the application. We do not know if we will be able to obtain fast track status for our product candidate, but if we do receive fast track designation, the review process should be shortened by several months.

The FDA may, during its review of a BLA, ask for additional data that may require conducting additional clinical trials. If the FDA does ultimately approve the product candidate for marketing, it may require post-marketing testing to monitor the safety and effectiveness of the product. The FDA also may in some circumstances impose restrictions on the use of the product.

We anticipate that our products will meet the qualifications of a “biological product” and, therefore, qualify for 12 years of data exclusivity currently provided under the Patient Protection and Affordable Care Act. However, there can be no assurance that the 12 years of exclusivity provided for under the Patient Protection and Affordable Care Act will remain in effect, or that our products will meet the qualifications of a “biological product” to receive the specified period of exclusivity. If we do qualify as a biologic under this law, other companies would be prevented from using our clinical data to support their applications for regulatory approval.

Before approving a BLA, the FDA 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 cGMP, which are regulations that govern the manufacture, holding and distribution of a product. Manufacturers of biologics also must comply with the FDA’s general biological product standards. Following approval, the FDA periodically inspects drug and biologic manufacturing facilities to ensure continued compliance with the good manufacturing practices regulations. We must ensure that any third-party manufacturers continue to comply with those 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. Adverse patient 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.

The labeling, advertising, promotion, marketing and distribution of a biologic product also must be in compliance with FDA and Federal Trade Commission requirements, which include, among others, standards and regulations for off-label promotion, industry sponsored scientific and educational activities, promotional activities involving the internet, and direct-to-consumer advertising. We will be subject to a variety of federal, state and local regulations relating to the use, handling, storage and disposal of hazardous materials, including chemicals and radioactive and biological materials. In addition, we will be subject to various laws and regulations governing laboratory practices and the experimental use of animals. In each of these areas, as above, the FDA has broad regulatory and enforcement powers, including the ability to levy fines and civil penalties, suspend or delay issuance of product approvals, seize or recall products, and deny or withdraw approvals.

In addition to laws and regulations enforced by the FDA, we are also subject to regulation under NIH guidelines as well as under the Controlled Substances Act, the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act and other present and potential future federal, state or local laws and regulations, as our research and development may involve the controlled use of hazardous materials, chemicals, viruses and various radioactive compounds.

We will also be subject to a variety of regulations governing clinical trials and sales of products outside the United States. Whether or not FDA approval has been obtained, approval of a product candidate by the comparable regulatory authorities of foreign countries and regions must be obtained prior to the commencement of marketing the product in those countries. In the European Union, Canada and Australia, regulatory requirements and approval processes are similar, in principle, to those in the United States. However, the approval process varies from one regulatory authority to another and the time may be longer or shorter than that required for FDA approval.

### ***Properties***

As of August 1, 2013, our new corporate offices are located at 21900 Burbank Blvd, Third Floor, Woodland Hills, California 91367. We lease these offices under a six-month lease for a monthly rental of \$7,300.

On July 18, 2014, we entered into a five -year lease with the University of South Florida Research Foundation for an approximately 5,100 square foot facility located at 3802 Spectrum Boulevard Tampa, Florida 33612. The new facility is part of the University of South Florida research park and will be used as our research and development facilities. The new space currently is being developed and furnished for our research needs and is expected to be available for use by the end of October 2014. The term of the lease will commence on the earlier to occur of the date when we take possession of the premises or the date that the tenant improvements are substantially completed. Our monthly base rent for this facility is \$10,443 for the first year, which amount will increase by 3% annually. We have the option to extend the lease term of this facility for an additional five year period on the same terms and conditions, except that the base rent for the renewal term will be increased in accordance with the applicable consumer price index.

On August 21, 2014 Elma Hawkins, PhD. MBA became our President and Chief Operating Officer. Prior to becoming an officer of this company, Dr. Hawkins was a consultant with an office in New York. As part of Dr. Hawkins' employment agreement, we agreed to reimburse Dr. Hawkins for her monthly office rental expenses, which range between \$1,000 to \$2,000.

We do not own or lease any other real property.

### ***Employees***

We currently have nine full-time employees. We have entered into employment agreements with four additional persons who will become employees at our new Tampa, Florida, research and development facility. These additional employees will join us at various times through October 2014. We also engage various consultants to provide various services, including regulatory affairs, quality assurance and compliance, product development, and clinical development services.

### ***Legal Proceedings***

#### **SEC Subpoena**

On April 23, 2014, the Company received a subpoena from the Securities Exchange Commission (the "SEC") that stated that the staff of the SEC is conducting an investigation *In the Matter of Galena Biopharma, Inc. File No. HO 12356* (now known as "*In the Matter of Certain Stock Promotions*") and that the subpoena was issued to the Company as part of the foregoing investigation. The SEC's subpoena and accompanying letter do not indicate whether the Company is, or is not, under investigation. The Company is cooperating with the SEC and has completed its production of documents in response to the subpoena. To date, the SEC has not requested any further action from the Company.

The subpoena required the Company to give the SEC, among other materials, all communications between anyone at the Company and certain persons and entities (which include investor-relations firms and persons associated with the investor-relations firms), all documents related to the listed persons and entities, all articles regarding the Company posted on certain equity research or other financial websites, and documents and communications related to individuals who post or have posted articles regarding the Company on equity research or other financial websites.

#### ***Theorem Group, LLC Litigation***

*Theorem Group, LLC vs. Lion Biotechnologies, Inc. (Case No.: BC550529)*. On July 2, 2014, Theorem Group, LLC filed a complaint for damages against the Company in the Superior Court of the State of California, Los Angeles County. Prior to relocating its offices to its current location in Woodland Hills, California, the Company subleased its offices from Theorem Group, LLC. In addition, Theorem Group, LLC occasionally made loans to the Company. In its complaint, Theorem Group, LLC alleges that the Company breached the sublease and owes Theorem Group, LLC \$138,719 under the sublease for unpaid rent and other expenses. In addition, Theorem Group, LLC alleges that it made a \$10,000 loan to the Company on March 18, 2013, and that Theorem Group, LLC and the Company orally agreed that Theorem Group, LLC could convert the \$10,000 loan in the May 2013 Restructuring. Theorem Group, LLC alleges that the \$10,000 loan was neither repaid nor converted in the Restructuring and, as a result, that Theorem Group, LLC is entitled to damages of \$150,000. The foregoing complaint was served on July 23, 2014, and the Company currently is evaluating the merits of the foregoing allegations.

There are no other pending legal proceedings to which the Company is a party or of which its property is the subject.



**MARKET PRICE OF AND DIVIDENDS ON COMMON EQUITY  
AND RELATED STOCKHOLDER MATTERS**

**Market Information**

Since October 23, 2013, our common stock has been quoted under the symbol “LBIO”. Prior thereto, our common stock was quoted under the symbol “GNBP”. Our common stock is currently quoted on the OTC QB market of the OTC Markets. Prior to October 23, 2013, our common stock was quoted on the OTC Pink Limited market and on the OTC Bulletin Board.

Trading in our common stock has been limited and sporadic during the past two years. As a result, the high and low bid information for our common stock may not be meaningful given the level of trading in our stock and our lack of business operations, revenues and assets. The following table shows the high and low prices of our common shares on the OTC Pink Limited market and the OTC Bulletin Board. The following quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not necessarily represent actual transactions. *The prices in the following table have been adjusted to reflect a 1-for-100 reverse stock split that we effected on September 26, 2013.*

<b>Fiscal Year Ended December 31, 2014</b>	<b>High</b>	<b>Low</b>
First Quarter	\$ 11.20	\$ 4.89
Second Quarter	\$ 11.25	\$ 5.52

<b>Fiscal Year Ended December 31, 2013</b>	<b>High</b>	<b>Low</b>
First Quarter	\$ 20.00	\$ 3.00
Second Quarter	\$ 7.00	\$ 1.00
Third Quarter	\$ 12.00	\$ 1.65
Fourth Quarter	\$ 16.00	\$ 3.41

<b>Fiscal Year Ended December 31, 2012</b>	<b>High</b>	<b>Low</b>
First Quarter	\$ 135.00	\$ 84.00
Second Quarter	\$ 122.00	\$ 35.00
Third Quarter	\$ 77.70	\$ 25.00
Fourth Quarter	\$ 50.00	\$ 13.00

**Stockholders**

As of September 10, 2014, there were approximately 126 holders of record of our common stock, not including any persons who hold their stock in “street name.” In addition, we had nine holders of record who owned shares of our Series A Preferred. The transfer agent for our Common Stock is Corporate Stock Transfer, Inc., located at 3200 Cherry Creek South Drive, Suite 430, Denver, Colorado 80209.

**Dividends**

We have not paid any dividends on our Common Stock to date and do not anticipate that we will pay dividends in the foreseeable future. Any payment of cash dividends on our Common Stock in the future will be dependent upon the amount of funds legally available, our earnings, if any, our financial condition, our anticipated capital requirements and other factors that the Board of Directors may think are relevant. However, we currently intend for the foreseeable future to follow a policy of retaining all of our earnings, if any, to finance the development and expansion of our business and, therefore, do not expect to pay any dividends on our Common Stock in the foreseeable future.

Under the terms of the Series A Preferred, we may not declare, pay or set aside any dividends on shares of any class or series of capital stock (other than dividends on shares of common stock payable in shares of common stock) unless the holders of the Series A Preferred first receive, or simultaneously receive, an equal dividend on each outstanding share of Series A Preferred.

## Securities Authorized for Issuance Under Equity Compensation Plans

### Equity Compensation Plan Information

The following table summarizes, as of December 31, 2013, (i) the number of shares of our common stock that are issuable under our equity compensation plans upon the exercise of outstanding options, warrants and other rights, (ii) the weighted-average exercise price of such options, warrants and rights, and (iii) the number of securities remaining available for future issuance under our equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)	(b)	(c)
Equity compensation plans approved by stockholders(1)	–	–	–
Equity compensation plans not approved by stockholders	278,750	\$9.13	1,456,250(2)
Total	278,750	\$9.13	–

- (1) On October 14, 2011, the Board of Directors adopted our 2011 Equity Incentive Plan. However, that plan has not been submitted to our stockholders for their approval. Accordingly, while we have an equity compensation plan, we do not have a plan that was approved by the stockholders.
- (2) As of the date of this prospectus, we are authorized to issue 1,900,000 shares of common stock under the 2011 Equity Incentive Plan.

## MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*You should read the following information together with our financial statements and notes thereto that are included in this prospectus. This discussion contains forward-looking statements that involve risks, uncertainties, and assumptions. Actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including, but not limited to, those presented under “Risk Factors” and elsewhere in this prospectus.*

### Overview

On October 5, 2011 we licensed the rights to the adoptive cell therapy from the National Institutes of Health (“NIH”) and to a manufacturing process for a TIL-based therapy (initially for Stage IV metastatic melanoma) that we intend to develop to enable us to make the adoptive cell therapy available to a larger number of patients. Under the license agreement we entered into with the NIH (the “License Agreement”), we will have to pay (i) royalties of six percent (6%) of net sales (subject to certain annual minimum royalty payments of \$20,000 per year), (ii) a percentage of revenues from sublicensing arrangements, and (iii) lump sum benchmark royalty payments on the achievement of certain clinical and regulatory milestones for each of the various indications.

We have recently been in discussions with the NIH to surrender to the NIH some of the unnecessary patents/patent applications included in the License Agreement and to license additional technologies from the NIH. These additional licensed rights would cover technology for potentially producing cells enriched for higher potency that have a lower cost of goods and a shorter manufacturing process. If we do obtain these license rights, our future license fees and other related costs will increase. In addition, should we obtain the additional licenses, a Phase 1 clinical trial is planned at NCI, which will also increase our future operating expenses. No assurance can be given that we will be able to obtain a license to the next generation technologies. If we are able to surrender these patents/patent applications, our future payment obligations under the License Agreement will be reduced. However, these reductions may be offset by future licensing and other payments we may be required to make to the NIH if we are able to license from the NIH the additional technologies currently under discussion.

In order to develop the adoptive cell immunotherapies we licensed from the NIH, effective August 5, 2011, we signed a Cooperative Research and Development Agreement (“CRADA”) with the NIH and the National Cancer Institute (“NCI”). Under the terms of the CRADA, we are required to pay \$1,000,000 per year (in quarterly installments of \$250,000) to support research activities thereunder and to pay for supplies and travel expenses.

In May 2013 we completed a restructuring of our unregistered debt and equity securities (the “Restructuring”) and raised \$1.25 million. Creditors holding (i) an aggregate of approximately \$7.2 million (including accrued interest and penalties) of the senior secured notes, (ii) an aggregate of approximately \$1.7 million (including accrued interest and penalties) of bridge promissory notes, and (iii) an aggregate of approximately \$0.3 million of other outstanding debt, converted these debts into shares of common stock at a conversion price of \$1.00 per share. In connection with the Restructuring, we also sold a total of 3,605,069 shares of common stock for \$1,250,000. The effect of the Restructuring and related stock sales and transactions was to extinguish all outstanding secured and unsecured promissory notes (representing liabilities of approximately \$8,373,000 in the aggregate) and to raise a total of \$1,350,000 of cash from the sale of the securities.

On July 24, 2013, we acquired Lion Biotechnologies, Inc., a privately owned Delaware corporation (“Lion Delaware”), through a merger with our newly formed Delaware subsidiary (the “Lion Merger”). In the Lion Merger, Lion Biotechnologies’ stockholders received, in exchange for all of their issued and outstanding shares of common stock, an aggregate of 2,690,000 shares of our common stock with a fair value of \$6,700,000 (of these shares, 1,340,000 were issued at the closing of the merger, and an additional 1,350,000 shares of common stock were issued later in 2013 upon the achievement of certain milestones related to our financial performance and position). The acquisition was done to acquire access to technical and managerial resources to build our current and future products, which we believed would enhance or future operations and enable us to obtain additional funding.

In November 2013, in order to fund our operating expenses, we raised a total of \$23,290,600 from the sale of our securities in the Private Placement. On November 5, 2013, we issued and sold an aggregate of 3,145,300 shares of our common stock, 17,000 shares of a new series of preferred stock designated as “Series A Convertible Preferred Stock,” and warrants (the “Warrants”) to purchase an aggregate of 11,645,300 shares of common stock for an aggregate purchase price of \$23,290,600 in cash. The amount of net proceeds available to us from the Private Placement, after placement agent fees, legal fees and other expenses, was approximately \$21.8 million.

During the six month period ended June 30, 2014, Warrants to purchase a total of 945,392 shares were exercised, at a price of \$2.50 per share. As a result of these exercises, we received an additional \$2,363,480 of cash during the first six months of 2014. Between June 30, 2014 through August 15, 2014, we received an additional \$250,000 of cash from the exercise of Warrants to purchase 100,000 shares of common stock.

On July 18, 2014, we entered into a five -year lease with the University of South Florida Research Foundation for an approximately 5,200 square foot facility in the University of South Florida research park. The new space will be used as our research and development facilities and is currently being built-out and furnished to our specifications. The landlord is contributing the build-out costs. However, our contribution to the build-out costs during the next three months is projected to be approximately \$500,000. The facility is expected to be available for our use by the end of October 2014. The monthly base rent for this facility during the first year of the lease is \$10,443, which amount will increase by 3% annually. We recently hired five scientists and research personnel to work the new research facility, and we expect to hire up to another five full or part-time employees to work at the facility. We will also have to purchase new laboratory equipment and supplies for the new facility. The build-out costs and the cost of the new equipment and supplies will require a substantial investment of funds in the near term, while the subsequent on-going salaries of the new employees will significantly increase our operating costs in the future.

On July 21, 2014, we entered into an Exclusive License Agreement (the "Moffitt License Agreement"), effective as of June 28, 2014, with the H. Lee Moffitt Cancer Center and Research Institute, Inc. ("Moffitt") under which we received an exclusive, world-wide license to Moffitt's rights in and to two patent-pending technologies related to methods for improving tumor-infiltrating lymphocytes for adoptive cell therapy. The license covers the application of this technology to all cancers, including metastatic melanoma. Pursuant to the Moffitt License Agreement, we agreed to pay an upfront licensing fee, payable within 30 days of the effective date of the Moffitt License Agreement, and a patent issuance fee payable upon the issuance of the first U.S. patent covering the subject technology. In addition, we have agreed to pay milestone license fees upon completion of specified milestones, customary royalties based on a specified percentage of net sales (which percentage is in the low single digits) and sublicensing payments, as applicable, and annual minimum royalties beginning with the first sale of products based on the licensed technologies, which minimum royalties will be credited against the percentage royalty payments otherwise payable in that year. We will also be responsible for all costs associated with the preparation, filing, maintenance and prosecution of the patent applications and patents covered by the Moffitt License Agreement related to the treatment of any cancers in the United States, Europe and Japan and in other countries selected that we and Moffitt agreed to. The upfront license fee, the possible patent issuance fees, the on-going patent fees will also add to our future operating costs.

### **Results of Operations for the Three and Six Months Ended June 30, 2014 Compared to the Three and Six Months Ended June 30, 2013**

#### Revenues

As a development stage company that is currently engaged in the development of therapeutics to fight cancer, we have not yet generated any revenues from our biopharmaceutical business or otherwise since our formation. We currently do not anticipate that we will generate any revenues during 2014 from the sale or licensing of any products.

#### Operating Expenses

Operating expenses include compensation-related costs for our employees engaged in general and administrative activities, legal fees, audit and tax fees, consultants and professional services, and general corporate expenses. Our operating expenses for the three months ended June 30, 2014 and 2013, were \$1,749,000 and \$779,000, respectively. Our operating expenses during the three months ended June 30, 2014 increased by \$970,000 compared with the three months ended June 30, 2013 due to the increase in our operating activities, higher legal fees, and to an increase in the amount of non-cash share-based compensation costs. In the fiscal quarter ended June 30, 2014, we incurred \$919,000 of non-cash share based compensation costs, compared to \$87,000 of such costs incurred for the three months ended June 30, 2013. Share based compensation includes stock options and shares of restricted stock granted to our executive officers, our employees, our directors, and our consultants and advisors. In the June 30, 2014 fiscal quarter, we incurred increased legal fees compared to the comparable 2013 fiscal quarter for counsel related to patent and licensing issues, and in connection with responding to the SEC's subpoena for certain documents and materials. For the six-month periods ended June 30, 2014 and June 30, 2013, our operating expenses were \$3,706,000 and \$1,214,000, respectively. In order to incentivize our employees, we grant all new employees stock options and/or shares of restricted stock. These equity grants increase our compensation costs. Since we employed six employees at June 30 2014 compared to one employee at June 30, 2013, our total compensation expenses for the six-month period ended June 30 2014 was \$533,000 compared to \$50,000 for the comparable six-month period in 2013. Likewise, non-cash share-based compensation costs for the six-month period ended June 30, 2014 increased to \$1,781,000 compared to only \$133,000 in the same six-month period of 2013. As our operating activities increase, we expect to hire additional employees and contractors. These new employees will further increase our future compensation expenses (including our future non-cash, share-based compensation expenses).

Our lease expenses are also expected to increase in October 2014 when our obligation to pay rent commences for our new research and development facility at the H. Lee Moffitt Cancer Center & Research Institute on the Tampa campus of the University of South Florida.

### Research and Development.

Research and development expenses to date have been primarily comprised of amounts paid to (i) the National Institutes of Health under terms of the License Agreement, and (ii) the NCI under the CRADA. We are required to pay \$250,000 per quarter under the CRADA and the \$20,000 annual minimum payments to the NIH under the NIH licensing agreement. Accordingly, these \$250,000 quarterly payments represented most of our research and development expenses during the three and six month periods ending June 30, 2013 and 2014. However, in the three- and six-months periods ended June 30, 2014 we also incurred \$33,000 of patent prosecution costs and \$111,000 of research and development costs. Now that we have leased our own research and development facility and have hired a new Chief Scientific Officer and four new scientists, our research and development activities will significantly increase in the future as we attempt to accelerate the development of our technologies. In addition, we recently issued a new statement of work to Lonza Walkersville, Inc. (Lonza) to commence setting up a centralized TIL manufacturing center for our planned multicenter, pivotal clinical trials. The work to be performed by Lonza will also materially increase our future research and development costs.

### Interest Expense.

Since we did not have any outstanding interest-bearing indebtedness in 2014, we did not incur any interest expense in the three- or six-months periods in 2014. Interest expense in the three- and six-month periods ended June 30, 2013 was \$104,000 and \$446,000, respectively, and represented the amount of interest that accrued on the various secured promissory notes and other convertible notes outstanding during that period. These notes were converted and cancelled in the May 2013 Restructuring.

### Cost to Induce Exchange Transaction.

In May 2013 we completed the Restructuring in which we converted approximately \$9,268,000 of outstanding debt into shares of common stock and otherwise extinguish all outstanding secured and unsecured promissory notes (representing liabilities of approximately \$8,373,000 in the aggregate). In connection with the Restructuring, we incurred costs non-cash expenses of \$2,296,000. We did not incur any similar expenses in 2014.

### Net Loss

We had a net loss of \$2,110,000 and \$3,429,000 for the three months ended June 30, 2014 and 2013, respectively, and a net loss of \$4,370,000 and \$4,476,000 for the six months ended June 30, 2014 and 2013, respectively. Our net loss for three months ended June 30, 2014 was less than the net loss incurred in the three months ended June 30, 2013 because of the significant costs incurred to induce the exchange transaction (the Restructuring) in 2013. The decrease in exchange transaction costs in 2014 was partially offset by a significant increase in non-cash share-based compensation and other operating expenses. Our net loss for six-month period ended June 30, 2014 was slightly less than the net loss incurred in the six months ended June 30, 2013 because of the \$2,296,000 cost we incurred in the 2013 period due to the Restructuring. Excluding the Restructuring costs, our net loss for the six month ended June 30, 2013 would have been \$2,180,000. We anticipate that we will continue to incur net losses in the future because we do not expect to generate any revenues in the near term, while our expenses related to our increased research and development activities are expected to increase.

## **Results of Operations for the Year Ended December 31, 2013 Compared to the Year Ended December 31, 2012**

### Revenues

We have not yet generated any revenues from our biopharmaceutical business or otherwise since our formation.

## Costs and expenses

### Operating Expenses.

Operating expenses include compensation-related costs for our employees dedicated to general and administrative activities, legal fees, audit and tax fees, consultants and professional services, and general corporate expenses. Our operating expenses were \$4,655,149 and \$6,476,546 for the fiscal years ended December 31, 2013 (“fiscal 2013”) and 2012 (“fiscal 2012”), respectively. Our operating expenses in fiscal 2013 decreased by \$1,821,397 compared to fiscal 2012 primarily as a result of the reduction of \$1,449,499 of consulting expenses. The total amount of consulting expenses we incurred in 2013 was \$35,977. The total amount of consulting expenses we incurred in 2012 was \$1,485,476. In addition, investor relations and automobile expenses decreased from the prior year. This was offset by the increase of non-cash compensation of \$221,969. The total amount of such non-cash compensation we paid in fiscal 2013 was \$2,750,223. However, in fiscal 2012, the total amount of such non-cash compensation we paid to officers and consultants was \$2,528,254. In addition, in late fiscal 2013 our wages, legal, accounting and other professional fees increased substantially as we increased our operating activities and expenses pending the completion of our fundraising efforts.

### Cost of Lion Transaction (Related Party).

In July 2013, we entered into an Agreement and Plan of Merger (the “Lion Agreement”) with Lion Biotechnologies, Inc., a privately held Delaware corporation. Under the Lion Agreement, Lion Biotechnologies, Inc.’s stockholders received, in exchange for all of their issued and outstanding shares of common stock, an aggregate of 1,340,000 shares of our common stock with a fair value of \$6,700,000. Under the Lion Agreement, we also were obligated to issue an additional 1,350,000 shares of common stock upon the achievement of certain milestones related to our financial performance and position). These other milestones were achieved in the fourth quarter of 2013 and, as a result, we issued all 1,350,000 shares (having a fair value of \$9,956,250) in 2013. The value of the shares issued under the Lion Agreement was recognized and recorded as an expense in 2013. The purpose of the Lion Agreement was to acquire access to technical and managerial resources to build our current and future products, which we believed would enhance or future operations and enable us to obtain additional funding. The technical resources that we acquired included access to next generation T-cell technologies (including term sheets for such technologies), access to cancer vaccine technologies that Lion Biotechnologies, Inc. was evaluating at Harvard University, NIH, Baylor University and other institutions, and other proprietary technologies and ideas on novel T-cell manufacturing technologies that that company was designing.

### Research and Development.

Research and development costs were \$1,329,000 for the year ended December 31, 2013, as compared to \$1,656,000 in fiscal 2012. Research and development expenses in fiscal 2013 included \$1,000,000 paid and accrued under the CRADA with the National Institutes of Health and \$329,000 paid to the NIH under the license agreement. Research and development expenses in fiscal 2012 included \$1,000,000 that we paid under the CRADA with the National Institutes of Health and \$636,000 we paid to the NIH under the License Agreement.

### Other income (expense)

### Interest expense.

Interest expense represents the amount of interest that accrued on the various promissory notes we issued to fund our operations, including the \$5,000,000 of 7% Tranche A Senior Unsecured Convertible Notes and Tranche B Senior Unsecured Convertible Notes we issued in 2011 (collectively, the “Senior Secured Notes”) and the \$1,231,000 of 12% secured promissory notes we issued in 2012 (the “12% Secured Notes”). Interest expense was \$444,729 and \$1,922,063 for the years ended December 31, 2013 and 2012, respectively. As described above, in May 2013 we effected the Restructuring, in which substantially all of our then outstanding indebtedness was converted into shares of our common stock. The decrease in interest-bearing obligations in 2013 decreased the amount of interest that accrued in 2013.

### Cost of Exchange Transaction (Restructuring).

In May 2013 we effected the Restructuring in which we converted outstanding indebtedness into shares of our common stock, exchanged outstanding warrants into additional shares of common stock, and issued shares of our common stock at discounted prices. We recorded a non-cash expense of \$2,296,000 in 2013 as a result of the Restructuring. No such expenses were incurred in 2012.

### Change in fair value of derivative liabilities.

We record the change in fair value of derivatives as other income or expense. Derivatives included in these calculations primarily consist of the outstanding options and warrants that we issued as part of various financing activities and common shares underlying our convertible notes payable. There was no change in fair value of derivative liabilities for the year ended December 31, 2013 compared to a gain of \$8,635,000 for the year ended December 31, 2012. The Company used the assistance of a valuation specialist to determine the fair value of its derivative liability at December 31, 2012. As a result of our inability to pay our debt obligations, the default status of our convertible promissory notes and lack of available working capital at December 31, 2012, for valuation purposes, we determined that the effect of the default and our insolvent financial condition was that the outstanding conversion features and warrants accounted for as derivative liability upon its issuance had no more value at December 31, 2012. In the May 22, 2013 Restructuring of our debt and equity securities, all of those securities that were accounted for as a derivative liability were converted into shares of our common stock. As such, we had no derivative liabilities as of December 31, 2013.

### Amortization of discount on convertible notes.

During the year ended December 31, 2012, we recorded a valuation discount of \$497,888 upon issuance of (i) the 12% secured promissory notes and (ii) a \$250,000 interim loan we issued in September 2012. During the year ended December 31, 2013 we did not issue any indebtedness that would have required us to record a valuation discount.

### Restructuring and Financing Costs.

In 2012 we incurred \$1,390,000 of costs associated with the fair value of warrants that we issued in connection with our financing transactions in 2012. No such private placement costs were incurred in 2013.

### Net Loss

We had a net loss of \$25,381,000 and \$3,308,000 in fiscal 2013 and fiscal 2012, respectively. Our net loss for fiscal 2013 increased by \$22,074,000 as compared to fiscal 2012 primarily as a result of non-cash expenses for (i) the cost of the Lion transaction (\$16,656,000), and (ii) the Restructuring (\$2,296,000). Our net loss in 2012 also benefitted from a non-cash gain due to the change in the fair value of derivative liabilities (a gain of \$8,635,000). These increased non-cash expenses in 2013 were partially offset by decreases in certain 2013 expenses, such as the decrease in operating expenses (a \$1,821,000 decrease) and the \$1,477,000 decrease in interest expense.

### **Liquidity and Capital Resources**

As a result of the Restructuring we completed in May 2013 to convert most of our liabilities into equity, and the funds we raised in November 2013 in the Private Placement, and subsequent exercise of a portion of the Warrants issued in the Private Placement, as of June 30, 2014 we had cash or cash equivalents of \$18,440,000 on hand and \$17,363,000 of working capital. Based on the funds we had available on June 30, 2014, we believe that we have sufficient capital to fund our anticipated operating expenses for at least the next twelve months.

For the six months ended June 30, 2014, we used \$3,590,000 of cash in operating activities. Our net loss of \$4,370,000 exceeded the amount of cash used in our operating activities because our net loss included non-cash compensation expenses of \$1,341,000 for vested options and non-cash expenses of \$441,000 for the grant of restricted shares. However, we also used \$1,113,000 of our cash to pay down a portion of our outstanding accounts payable and accrued expenses.

During the first six months of 2014, our cash flow from investing activities consisted of the \$2,363,000 of cash that we received from the exercise of some of the common stock purchase warrants that we sold in the November 2013 Private Placement.

During the remainder of 2014, we expect to incur significant expenses related to the establishment of the new Tampa research and development facility and to the further ramp up our operations. In addition, we will have to purchase laboratory equipment and laboratory supplies for the new facility. We currently estimate that we will incur over \$5 million of expenses during the next two years in connection with the construction, refurbishment and operation of the Tampa research facility. Our budget for the balance of 2014 includes increased spending on research and development activities, higher payroll expenses as we increase our professional staff, expenses for establishing and then operating a new research and development facility in Tampa, Florida, as well as ongoing payments under the CRADA. In addition, we recently issued a new statement of work to Lonza Walkersville, Inc. to commence setting up a centralized TIL manufacturing center for our planned multicenter, pivotal clinical trials. The work to be performed by Lonza will also materially increase our near term research and development expenses. Our budget anticipates that we will spend approximately \$10 million to \$12 million (including amounts that we have already spent) in 2014 on budgeted expenditures, although that amount may change materially.

Despite the amount of funds that we raised in the Private Placement, the estimated cost of completing the development of our TIL therapy, and of obtaining all required regulatory approvals to market those product candidates, substantially exceeds the amount of funds we currently have available. While we believe that our existing cash balances will be sufficient to fund our currently planned level of operations for at least the next twelve months, we will have to obtain additional funds through various financing sources, including possible sales of our securities and strategic alliances with other pharmaceutical or biopharmaceutical companies, in order to fund all of our anticipated product development costs.

As of the date of this prospectus, our principal long-term obligations consist of the \$1,000,000 per year (in quarterly installments of \$250,000 through August 2016) obligation to the NCI under the CRADA to support research activities thereunder, and the benchmark payments we are required to make to the NIH based on the development and commercial release of licensed products using the technology underlying the License Agreement. If we achieve all benchmarks for metastatic melanoma, our current primary focus, up to the product's first commercial sale in the United States, the total amount of all such benchmark payments payable under the License Agreement will be \$6,050,000 for the melanoma indication. However, this amount may be reduced because we are currently surrendering to the NIH some of the patents/patent applications licensed to us under the License Agreement that we do not believe are useful for our anticipated future research and development or our planned products. Other than these two foregoing contractual obligations to the NCI and the NIH and our lease obligations for our offices in California and Florida (which collectively require us to pay \$208,000 of rental payments annually), we currently have no long-term debt obligations and no capital lease obligations. However, through the end of 2014, we expected to incur costs of (i) approximately \$500,000 to develop the Tampa, Florida, research facility, and (ii) approximately \$1,300,000 for the purchase of laboratory equipment and supplies. We have no financial guarantees, debt or lease agreements or other arrangements that could trigger a requirement for an early payment or that could change the value of our assets, and we do not engage in trading activities involving non-exchange traded contracts.

Inflation and changing prices have had no effect on our continuing operations over our two most recent fiscal years.



## Recent Accounting Pronouncements

On June 10, 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-10 (ASU 2014-10), Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation. ASU 2014-10 eliminates the requirement to present inception-to-date information about income statement line items, cash flows, and equity transactions, and clarifies how entities should disclose the risks and uncertainties related to their activities. ASU 2014-10 also eliminates an exception provided to development stage entities in Consolidations (ASC Topic 810) for determining whether an entity is a variable interest entity on the basis of the amount of investment equity that is at risk. The presentation and disclosure requirements in Topic 915 are no longer required for interim and annual reporting periods beginning after December 15, 2014. The revised consolidation standards will take effect in annual periods beginning after December 15, 2015, however, early adoption is permitted. The Company adopted the provisions of ASU 2014-10 for the six-months ended June 30, 2014.

On May 28, 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-09 (ASU 2014-09), Revenue from Contracts with Customers. ASU 2014-09 will eliminate transaction- and industry-specific revenue recognition guidance under current U.S. GAAP and replace it with a principle based approach for determining revenue recognition. ASU 2014-09 will require that companies recognize revenue based on the value of transferred goods or services as they occur in the contract. The ASU also will require additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for reporting periods beginning after December 15, 2016, and early adoption is not permitted. Entities can transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. Management has not determined the effect of adopting ASU 2014-09 on our ongoing financial reporting.

In April 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-08, "Presentation of Financial Statements (Topic 205) and Property, Plant and Equipment (Topic 360)." ASU 2014-08 amends the requirements for reporting discontinued operations and requires additional disclosures about discontinued operations. Under the new guidance, only disposals representing a strategic shift in operations or that have a major effect on the Company's operations and financial results should be presented as discontinued operations. This new accounting guidance is effective for annual periods beginning after December 15, 2014. The Company is currently evaluating the impact of adopting ASU 2014-08 on the Company's results of operations or financial condition.

Other recent accounting pronouncements issued by the FASB, including its Emerging Issues Task Force, the American Institute of Certified Public Accountants, and the Securities and Exchange Commission did not have, or are not believed by management to have a material impact on the Company's present or future financial statements.

## Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements and accompanying notes, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. When making these estimates and assumptions, we consider our historical experience, our knowledge of economic and market factors and various other factors that we believe to be reasonable under the circumstances. Actual results may differ under different estimates and assumptions.

The accounting estimates and assumptions discussed in this section are those that we consider to be the most critical to an understanding of our financial statements because they inherently involve significant judgments and uncertainties.

## Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from these estimates.

## Stock-Based Compensation

We periodically issue stock options and warrants to employees and non-employees in non-capital raising transactions for services and for financing costs. We adopted FASB guidance effective January 1, 2006, and are using the modified prospective method in which compensation cost is recognized beginning with the effective date (a) for all share-based payments granted after the effective date and (b) for all awards granted to employees prior to the effective date that remain unvested on the effective date. We account for stock option and warrant grants issued and vesting to non-employees in accordance with accounting guidance whereby the fair value of the stock compensation is based on the measurement date as determined at either (a) the date at which a performance commitment is reached, or (b) the date at which the necessary performance to earn the equity instrument is complete.

We estimate the fair value of stock options using the Black-Scholes option-pricing model, which was developed for use in estimating the fair value of options that have no vesting restrictions and are fully transferable. This model requires the input of subjective assumptions, including the expected price volatility of the underlying stock and the expected life of stock options. Projected data related to the expected volatility of stock options is based on the historical volatility of the trading prices of the Company's common stock and the expected life of stock options is based upon the average term and vesting schedules of the options. Changes in these subjective assumptions can materially affect the fair value of the estimate, and therefore the existing valuation models do not provide a precise measure of the fair value of our employee stock options.

## Derivative Financial Instruments

We evaluate all of our financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives. For stock-based derivative financial instruments, we use both a weighted average Black-Scholes-Merton and Binomial option pricing models to value the derivative instruments at inception and on subsequent valuation dates. The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is evaluated at the end of each reporting period. Derivative instrument liabilities are classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument could be required within 12 months of the balance sheet date.

## **Off-Balance Sheet Arrangements**

At June 30, 2014, we had no obligations that would require disclosure as off-balance sheet arrangements.

## **DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS**

### **Executive Officers and Directors**

The following table sets forth the name, age and position held by each of our executive officers and directors. Directors are elected for a period of one year and thereafter serve until the next annual meeting at which their successors are duly elected by the stockholders.

<b>Name</b>	<b>Age</b>	<b>Position</b>
Manish Singh	46	Chairman of the Board and Chief Executive Officer
Merrill A. McPeak <sup>(2)(3)</sup>	77	Director
Sanford J. Hillsberg <sup>(1)(2)</sup>	65	Director
Jay Venkatesan <sup>(1)(3)</sup>	41	Director
Elma Hawkins, Ph.D.	58	President and Chief Operating Officer
Michael Handelman	55	Chief Financial Officer
James Bender, Ph.D.	63	Vice President--Manufacturing
Laszlo Radvancy, Ph.D.	52	Chief Scientific Officer

<sup>(1)</sup> Member of our Compensation Committee

<sup>(2)</sup> Member of our Nominating and Corporate Governance Committee

<sup>(3)</sup> Member of our Audit Committee

### **Recent Management Changes**

Anthony J. Cataldo was our Chief Executive Officer and Chairman of the Board during 2012. Michael Handelman, William Andrews, Martin Schroeder, General (Ret.) Merrill McPeak and L. Stephen Coles, M.D., Ph. D also served as directors on the Board of Directors during 2012. With the consent of the Board of Directors, on January 14, 2013 Mr. Cataldo took a leave of absence from his position as our Chief Executive Officer (although he remained on the Board of Directors), and General (Ret.) Merrill McPeak took over as our interim Chief Executive Officer.

On May 20, 2013, Martin Schroeder resigned from our Board of Directors. On May 22, 2013, in connection with the Restructuring, Anthony Cataldo, Michael Handelman and William Andrews resigned from the Board of Directors, and on May 24, 2013, this company's stockholders removed L. Stephen Coles, M.D., Ph. D from the Board and elected Paul Kessler as a director on the Board. Accordingly, from May 24, 2013 through July 24, 2013, our Board of Directors consisted of Messrs. McPeak, Voyticky and Kessler.

On July 24, 2013, we acquired Lion Biotechnologies, Inc., a Delaware corporation, in the Lion Merger. In connection with the Lion Merger, on July 24, 2013, Manish Singh, the principal executive officer and shareholder of Lion Delaware, was appointed as our new Chief Executive Officer, and he also joined our Board of Directors as its Chairman. At that time, General McPeak resigned as our interim Chief Executive Officer. As part of the Lion Merger, Paul Kessler and David Voyticky agreed to resign from the Board, and we agreed that Sanford Hillsberg and Jay Venkatesan would be appointed to the Board. The foregoing resignations of Mr. Kessler and Mr. Voyticky, and the appointment of Mr. Hillsberg and Dr. Venkatesan became effective on September 3, 2013.

On January 6, 2014, James Bender, Ph.D. joined us as our new Vice President--Manufacturing, on June 23, 2014, Laszlo Radvanyi, Ph.D. joined us as our new Chief Scientific Officer, and on August 21, 2014 Elma Hawkins, PhD. MBA became our President and Chief Operating Officer. See, "Executive Officers," and "Executive Compensation--Employment Agreements," below.

### **Business Experience and Directorships**

The following sets forth the business experience and directorships of our current Board and our two executive officers.

## Current Directors

Manish Singh. Dr. Singh has served as our Chief Executive Officer and Chairman of the Board since his appointment on July 24, 2013. Dr. Singh also served as our President from July 2013 until August 2014. Dr. Singh is a founder and principal of Lion Biotechnologies, Inc., the Delaware Company that we acquired in July 2013. Prior to founding Lion Delaware, Dr. Singh served as the President, Chief Executive Officer and as a Director of ImmunoCellular Therapeutics, Ltd from February 2008 to August 2012. Dr. Singh served as a Director at California Technology Ventures, a venture capital firm from June 2003 to December 2007. He managed investments made by that venture capital firm in a number of medical device and biotechnology companies and served as a board director or board observer for several of the firm's portfolio companies. From October 1995 to June 2003, he held various management and scientific positions with Odysseus Solutions, Cell Genesys, Chiron Corporation and Genetic Therapy, Inc. Dr. Singh has an MBA from UCLA, a Ph.D. in Chemical and Biochemical Engineering from the University of Maryland Baltimore County, an M.S. in Chemical Engineering from Worcester Polytechnic Institute and a B.S. in Chemical Engineering from the Indian Institute of Technology, Roorkee. None of the above described organizations are affiliated with the Company.

Merrill A. McPeak. General (Ret.) McPeak has served as a member of our Board of Directors since July 2011. In addition, General McPeak served as our interim Chief Executive Officer from January 14, 2013 until July 24, 2013. General McPeak currently is the President of McPeak and Associates, a consulting firm that he founded in 1995. He has previously served as a director of several public companies, including Tektronix, Inc., Trans World Airlines, Inc., and ECC International Corp., where he was for many years the chairman of the Board. General McPeak has served as a director of DGT Holdings, Corp., a real estate business, since April 2005, of Research Solutions, Inc., a company engaged in developing systems to reuse published content, since November 2010, and of GenCorp, an aerospace and defense contractor, since March 2013. He was Chairman of the Board of Coast Plating, Inc., a privately held turnkey provider of metal processing and metal finishing services, from January 2009 until the company was acquired by Trive Capital and renamed Valence Surface Technologies, now the country's largest independently owned aerospace and defense metal processing company. He continues to be a Director of the company. He helped found, and from December 2003 to February 2012 was Chairman of the Board of EthicsPoint, Inc., a provider of risk management and compliance software-as-a-service that was acquired in 2012 and restyled Navex Global. General McPeak remains a member of the board of directors of Navex Global. In 2010, General McPeak was a director of Point Blank Solutions, Inc., a former public company that on April 14, 2010 filed a voluntary petition for relief under Chapter 11 of the United States Code in the U.S. Bankruptcy Court for the District of Delaware.

From 1990 until his retirement from active military service in late-1994, General McPeak was Chief of Staff of the United States Air Force. As a member of the Joint Chiefs of Staff, General McPeak was a military advisor to the Secretary of Defense and the President of the United States. General McPeak received a Bachelor of Arts degree in economics from San Diego State College and a Master of Science degree in international relations from George Washington University, and is a member of the Council on Foreign Relations. Since July 2010, General McPeak has been Chairman of the American Battlefield Monuments Commission.

Sanford J. Hillsberg. Mr. Hillsberg joined the Board of Directors on September 3, 2013. Mr. Hillsberg has been an attorney with TroyGould PC since 1976 and is a member of the firm's Management Committee. Mr. Hillsberg has served as the Chairman of the Board of Directors of Galena Biopharma, Inc., a publicly-held biopharmaceutical company focused on developing oncology treatments since 2007. Mr. Hillsberg was a founder and until December 2007, served as a director and Secretary of ImmunoCellular Therapeutics, Ltd., a publicly-held clinical-stage biotechnology company focused on developing immune-based therapies to treat cancer, and its predecessor company since February 2004. Mr. Hillsberg served as a director and Secretary of Duska Therapeutics, Inc., a publicly-held biopharmaceutical company, and its predecessor company from 1999 until January 2006. He previously served as a director and Vice President of Medco Research, Inc., a then publicly-held pharmaceutical company. Mr. Hillsberg is a member of the Board of Governors of Cedars-Sinai Medical Center and has also previously served as a Commissioner of the Quality and Productivity Commission of the City of Los Angeles. Mr. Hillsberg holds a B.A. degree from the University of Pennsylvania and a J.D. degree from Harvard Law School.

Jay Venkatesan, M.D. Dr. Venkatesan joined the Board of Directors on September 3, 2013. Dr. Venkatesan currently is the Managing Member and the Portfolio Manager of Ayer Capital Management LP, a position that he has held since founding that dedicated health care investment fund in 2008. Prior to founding Ayer Capital, Dr. Venkatesan was a Director at Brookside Capital Partners, the \$9.8 billion hedge fund group affiliated with Bain Capital. Prior to joining Brookside, Dr. Venkatesan was the founder and CEO of Varro Technologies, a knowledge management software company focused on the life sciences. Previously, he was involved in healthcare venture investing at Patricof & Co. Ventures and in consulting at McKinsey & Company. Dr. Venkatesan received his M.D. from the University of Pennsylvania School of Medicine and his MBA from the Wharton School of the University of Pennsylvania. He received his B.A., magna cum laude, from Williams College, where he was elected to Phi Beta Kappa.

#### **Executive Officers**

Manish Singh Dr. Singh has served as our Chief Executive Officer and Chairman of the Board since his appointment on July 24, 2013. See, “Business Experience and Directorships—Current Directors,” above.

Elma Hawkins Ph.D. MBA Dr. Hawkins has served as our President and Chief Operating Officer since her appointment on August 21, 2014. From February 2014 until her appointment President and Chief Operating Officer, Dr. Hawkins provided consulting services to us as our Head of Clinical Development. Since 2006 Dr. Hawkins has been an independent consultant to various biotechnology companies and financial institutions. Dr. Hawkins started her career at Warner-Lambert/Parke-Davis in Clinical Research. Later she joined the Center for the Study of Drug Development at Tufts Medical School. Following that, she held various positions at BioSurface Technology and Genzyme Corporation, and at Antigenics, most recently as that company’s Vice Chairman. Later, she was President and CEO of Advanced Viral Research. She also serves on the Health Care Advisory Board for the Partnership for New York City. Dr. Hawkins has BSc in Mathematics and Chemistry, BSc (Hons) in Chemistry, MSc in Organic Chemistry, a PhD in Organic Chemistry and an MBA with specialization in entrepreneurship.

Michael Handelman Mr. Handelman has served as our Chief Financial Officer and Secretary since February 2011. He also was on our Board of Directors from February 2011 until the Restructuring in May 2013. Mr. Handelman served as the Chief Financial Officer and as a financial management consultant of Oxis International, Inc., a public company engaged in the research, development and commercialization of nutraceutical products, from August 2009 until October 2011. From November 2004 to July 2009, Mr. Handelman served as Chief Financial Officer and Chief Operating Officer of TechnoConcepts, Inc., formerly a public company engaged in designing, developing, manufacturing and marketing wireless communications semiconductors, or microchips. Prior thereto, Mr. Handelman served from October 2002 to October 2004 as Chief Financial Officer of Interglobal Waste Management, Inc., a manufacturing company, and from July 1996 to July 1999 as Vice President and Chief Financial Officer of Janex International, Inc., a children’s toy manufacturer. Mr. Handelman was also the Chief Financial Officer from 1993 to 1996 of the Los Angeles Kings, a National Hockey League franchise. Mr. Handelman is a certified public accountant and holds a degree in accounting from the City University of New York.

James Bender, Ph.D. Dr. Bender joined us as our Vice President – Manufacturing on January 6, 2014. From September 2008 to December 2013 and has served as Vice President of Clinical Development and then as Vice President – Product Development and Manufacturing at ImmunoCellular Therapeutics, Ltd., a publicly-held clinical-stage biotechnology company focused on developing immune-based therapies to treat cancer. From 2002 through 2008, Dr. Bender held various positions at IDM Pharma, most recently as director of product development where he led that company’s efforts relating to the clinical development of a cancer vaccine for the treatment of lung cancer. Prior to that, he held various positions at Nexell Therapeutics relating to the development of therapeutic stem cell and cancer vaccine products. Prior to that, Dr. Bender spent ten years with Baxter Healthcare Corporation, eight years with the University of New Mexico School of Medicine and five years with St. Joseph’s Hospital in Albuquerque, New Mexico. He has over 75 scientific publications, is an inventor of 11 U.S. patents and holds a Ph.D. degree in immunology from the University of New Mexico and an M.P.H. in laboratory management from the University of Michigan.

Laszlo Radvanyi, Ph.D. Dr. Radvanyi became our Chief Scientific Officer in June 2014. Dr. Radvanyi was a member of our Scientific & Medical Advisory Board from June 2011 until his appointment as our Chief Scientific Officer. Dr. Radvanyi currently is an Adjunct Professor at the Moffitt Cancer Center. From January 2005 through June 2104, Dr. Radvanyi had a dual appointment professorship in the Departments of Breast Medical Oncology and Melanoma Medical Oncology at the University of Texas, M.D. Anderson Cancer Center where he conducted clinical studies on tumor infiltrating lymphocytes therapy in metastatic melanoma. Prior thereto, Dr. Radvanyi served from October 2000 until January 2005 as a research scientist at the Immunology Group at Sanofi-Pasteur in Toronto. Dr. Radvanyi currently serves on the scientific advisory board of Aethlon Medical, Inc. Dr. Radvanyi received his Ph.D. in clinical biochemistry from the University of Toronto and completed post-doctoral fellowships at Scripps Research Institute and Harvard Medical School.

### **Relationships**

There are no family relationships among any of our current or new directors, executive officers or key employees.

### **Scientific & Medical Advisory Board**

To assist with the development and commercialization of our TIL-based therapy, we have recruited a team of scientists and clinicians experienced with the development and use of adoptive cell therapy using autologous tumor infiltrating lymphocytes for the treatment of cancer. Our Scientific & Medical Advisory Board advises regarding our scientific and regulatory strategy. The members include:

Cassian Yee, M.D., Fred Hutchinson Cancer Research Center. Dr. Yee currently is a Professor at both the Department of Melanoma Medical Oncology and the Department of Immunology, Division of Cancer Medicine, The University of Texas MD Anderson Cancer Center.

Mario Sznol, M.D., Yale University School of Medicine. Dr. Mario Sznol is an associate professor of medicine and vice-chief of the Section of Medical Oncology. Dr. Sznol was formerly with the National Cancer Institute. He currently cares for patients with melanoma and serves as head of the melanoma disease unit at Yale University's School of Medicine. In addition, he chairs the Yale Cancer Center's Protocol Review Committee and is a member of the Yale Human Investigations Committee. Dr. Sznol received his BA from Rice University, and his MD from the Baylor College of Medicine.

James Mulé, Ph.D. H. Lee Moffitt Cancer Center & Research Institute. Dr. James J. Mulé is Executive Vice President, Associate Center Director for Translational Research, the Michael McGillicuddy Endowed Chair for Melanoma Research and Treatment, and the Director of Cell-Based Therapies at H. Lee Moffitt Cancer Center & Research Institute. Dr. Mulé received his formal training at the Fred Hutchinson Cancer Research Center in Seattle, and at the Surgery Branch, Division of Cancer Treatment, National Cancer Institute, NIH, Bethesda, Md. He also was an adjunct faculty member in the Department of Surgery, Stanford University, the Director of the Tumor Immunology and Immunotherapy Clinical Research Program at the University of Michigan Comprehensive Cancer Center, and the Maude T. Lane Endowed Professor of Surgery, Department of Surgery. Dr. Mulé serves on the advisory boards of seven NCI-designated Cancer Centers and was a member of the NCI's Board of Scientific and Clinical Counselors.

Jeffrey Weber, M.D., Ph.D., H. Lee Moffitt Cancer Center & Research Institute. Dr. Weber is the director of the Donald A. Adam Comprehensive Melanoma Research Center at Moffitt Cancer Center and a professor of Oncology and Medicine at the University of South Florida College of Medicine. Dr. Weber received his doctorate in Molecular Cell Biology from Rockefeller University and his medical degree from New York University Medical Center. Dr. Weber also trained at the National Cancer Institute.

Patrick Hwu, M.D., MD Anderson Cancer Center. Dr. Patrick Hwu was recruited to be the first Chairman of MD Anderson Cancer Center's Department of Melanoma Medical Oncology in 2003. Since that time, he has also served as Associate Director of the Center for Cancer Immunology Research and is the current Chair of MD Anderson Cancer Center's Promotion and Tenure Committee. Dr. Hwu is a member of the editorial board of the Journal of Immunotherapy. Dr. Hwu first joined our Scientific & Medical Advisory Board in April 2011. Dr. Hwu's prior consulting agreement has expired and we are currently in the process of signing a new consulting agreement, which agreement will also be subject to MD Anderson Cancer Center's approval.

David DiGiusto, Ph.D., City of Hope. Dr. DiGiusto cell biologist and immunologist. He serves in a number of positions with City of Hope, including: Director, Analytical Cytometry Core Facility; Professor, Cancer Immunotherapeutics & Tumor Immunology; Director, Cellular Process Development & Manufacturing; Associate Member, Cancer Immunotherapeutics Program, Comprehensive Cancer Center; and, Associate Member, Hematologic Malignancies Program, Comprehensive Cancer Center.

Daniel Powell, Ph.D., University of Pennsylvania School of Medicine. Dr. Powell holds the following positions at the University of Pennsylvania School of Medicine: Research Assistant Professor of Pathology and Laboratory Medicine; Assistant Director, Clinical Cell and Vaccine Production Facility; Director, Cellular Therapy Tissue Facility; and, Department: Pathology and Laboratory Medicine.

## **COMMITTEES OF THE BOARD OF DIRECTORS**

Our Board has a standing Audit Committee, Nominating and Governance Committee, and Compensation Committee.

Audit Committee. The Audit Committee operates pursuant to a written charter. Among other things, the Audit Committee is responsible for:

- reviewing and discussing with management and the independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- hiring our independent registered public accounting firm, and coordinating the oversight and review of the adequacy of our internal control over financial reporting with both management and the independent registered public accounting firm; and
- reviewing and, if appropriate, approving all transactions between our company or its subsidiaries and any related party.

Since September 3, 2013, Jay Venkatesan, as Chairman, and General Merrill McPeak constitute all of the members of the Audit Committee. General McPeak and Dr. Venkatesan are non-employee directors and independent as defined under The Nasdaq Stock Market's listing standards. Dr. Venkatesan has significant knowledge of financial matters, and our Board has designated him as the "audit committee financial expert" of the Audit Committee. Dr. Venkatesan received an MBA from the Wharton School of the University of Pennsylvania and has extensive experience as a financial analyst.

Nominating and Governance Committee. The Nominating and Governance Committee recommends candidates to be nominated for election as directors at our annual meeting, consistent with criteria approved by the Board; develops and regularly reviews corporate governance principles and related policies for approval by the Board; oversees the organization of the Board to discharge the Board's duties and responsibilities properly and efficiently; and sees that proper attention is given and effective responses are made to stockholder concerns regarding corporate governance. The Nominating and Governance Committee also reviews proposed changes to our Articles of Incorporation, Bylaws and Board committee charters and conducts ongoing reviews of potential related party transactions and conflicts of interest, including the review and approval of all "related person transactions" as defined under SEC rules.

Usually, nominees for election to our Board are proposed by our existing directors. In identifying and evaluating individuals qualified to become Board members, our current directors will consider such factors as they deem appropriate to assist in developing a Board of Directors and committees thereof that are diverse in nature and comprised of experienced and seasoned advisors. Our Board of Directors has not adopted a formal policy with regard to the consideration of diversity when evaluating candidates for election to the Board. However, our Board believes that membership should reflect diversity in its broadest sense, but should not be chosen nor excluded based on race, color, gender, national origin or sexual orientation. In this context, the Board does consider a candidate's experience, education, industry knowledge and, history with the Company, and differences of viewpoint when evaluating his or her qualifications for election the Board. In evaluating such candidates, the Board seeks to achieve a balance of knowledge, experience and capability in its composition. In connection with this evaluation, the Board determines whether to interview the prospective nominee, and if warranted, one or more directors interview prospective nominees in person or by telephone.

Since September 3, 2013, our Nominating and Governance Committee has consisted of Merrill McPeak, as Chairman, and Sanford J. Hillsberg.

Compensation Committee. The Compensation Committee is responsible for the compensation of our executives and directors; reviews and approves any reports required by the SEC for inclusion in the annual report and proxy statement; provides general oversight of our compensation structure; and, if deemed necessary, retains and approves the terms of the retention of compensation consultants and other compensation experts. Other specific duties and responsibilities of the Compensation Committee include reviewing senior management selection and overseeing succession planning; reviewing and approving objectives relevant to executive officer compensation, evaluating performance and determining the compensation of executive officers in accordance with those objectives; approving severance arrangements and other applicable agreements for executive officers; overseeing our equity-based and incentive compensation; and establishing compensation policies and practices for service on the Board and its committees and for the Chairman of the Board.

Since September 3, 2013, our current members of the Compensation Committee consist of Sanford J. Hillsberg, as Chairman, and Jay Venkatesan.

## EXECUTIVE COMPENSATION

### Compensation of Executive Officers

The following table sets forth the compensation for services paid in all capacities for the two fiscal years ended December 31, 2013 to all persons who served as our Chief Executive Officer during 2013 and to Michael Handelman, who has served as our Chief Financial Officer during 2013, and who was our only other executive officer who received compensation in excess of \$100,000 in either 2013 or 2012. Mr. Cataldo was our Chief Executive Officer on January 1, 2013. On January 14, 2013, Mr. Cataldo took a leave of absence from his position as our Chief Executive Officer, and General (Ret.) Merrill McPeak took over as our interim Chief Executive Officer. Mr. Cataldo formally resigned as our Chief Executive Officer on June 19, 2013. Mr. McPeak continued to serve as our interim Chief Executive Officer until Manish Singh was appointed as our new Chief Executive Officer on July 24, 2013. Mr. McPeak did not receive any compensation for his services as our interim Chief Executive Officer. Mr. Cataldo, Mr. McPeak, Dr. Singh and Mr. Handelman are our "named executive officers." Manish Singh currently is our Chief Executive Officer.



## Summary Compensation Table

Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$)	Option Awards (\$)	All other Compensation (\$)	Total (\$)
Anthony Cataldo Former President and Chief Executive Officer	2013	\$ 133,000 <sup>(1)</sup>	-0-	\$ -0-	\$ -0-	-0-	\$ 133,000
	2012	280,500	-0-	-0-	-0-	-0-	280,500
Merrill McPeak Former President and Chief Executive Officer	2013	\$ -0-	-0-	\$ -0-	\$ -0-	-0-	\$ -0-
	2012	N/A	N/A	N/A	N/A	N/A	N/A
Manish Singh Chief Executive Officer	2013	\$ 66,627 <sup>(2)</sup>	-0-	\$ -0-	\$ -0-	-0-	\$ 66,627
	2012	N/A	N/A	N/A	N/A	N/A	N/A
Michael Handelman Chief Financial Officer	2013	\$ 180,000	-0-	-0-	\$ -0-	-0-	180,000
	2012	\$ 180,000	-0-	-0-	\$ -0-	-0-	180,000

- (1) Represents the amount of compensation that we accrued for Mr. Cataldo's during 2013. On June 19, 2013, we entered into a settlement agreement with Mr. Cataldo in which we agreed to pay him \$370,000 to settle all claims between Mr. Cataldo and this company, including, but not limited to, amounts owed to him under his employment agreement. On November 18, 2013, we revised the terms of the settlement agreement and paid Mr. Cataldo \$250,000 in cash as payment in full for all amounts owed to him under the settlement agreement.
- (2) Represents Dr. Singh's salary from the date of his appointment as our Chief Executive Officer on July 24, 2013. We agreed with Dr. Singh that his annual base salary would be \$34,000 until we raised at least \$1,000,000 in additional financing, after which his salary would automatically increase to \$350,000. Since we raised over \$1,000,000 in the November 5, 2013 Private Placement, Dr. Singh's annual salary increased at that time to \$350,000.

### 2013 Grants of Plan-Based Awards

We did not grant any stock options in 2013 to our named executive officers under our 2011 Equity Incentive Plan or otherwise.

### Employment Agreements

We currently are a party to employment agreements that we have entered into with Manish Singh, who serves as our Chief Executive Officer, Michael Handelman who serves as our Chief Financial Officer and Secretary, James Bender, our Vice President--Manufacturing, Elma Hawkins, our President and Chief Operating Officer, and Laszlo Radvanyi, our new Chief Scientific Officer.

Manish Singh. In connection with his appointment as Chief Executive Officer and Chairman of the Board, we entered into an employment agreement (the "Employment Agreement") with Dr. Singh pursuant to which we are required to pay Dr. Singh an annual base salary of \$34,000 until this company raises at least \$1,000,000 in additional financing, after which his salary would automatically increase to \$350,000. Since we raised over \$1,000,000 in the November 5, 2013 Private Placement, Dr. Singh's annual salary has increased to \$350,000. In addition to his base salary, Dr. Singh will be eligible to participate in the company's annual incentive compensation program, with a target potential bonus of 30% of Dr. Singh's salary, conditioned upon the satisfaction of individual and company objectives. Dr. Singh will also be entitled to health and other benefits programs and, on July 24, 2014, he will also be eligible to receive stock option grants under our stock option plan.

Dr. Singh's employment under the Employment Agreement is "at-will" and not for any specific period of time. As a result, Dr. Singh is free to resign at any time, for any or no reason, and we may terminate Dr. Singh's employment at any time, with or without cause. However, in the event that we terminate the Employment Agreement without cause then (1) we will be required to make a lump sum payment to Dr. Singh equal to 12 months of his base annual salary, and (2) any unvested stock options will become fully vested and Dr. Singh will have one year within which to exercise his vested options (the "Severance Package"). If Dr. Singh terminates his employment for "good reason" as defined in the Employment Agreement, he will receive the severance benefits described in the preceding sentence. If, within six months immediately preceding a Change of Control (as defined in the Employment Agreement) or within 12 months immediately following a Change of Control, Dr. Singh's employment is terminated by us for any reason other than cause, then Dr. Singh will be entitled to receive the Severance Package. Had the Employment Agreement been terminated by us without "cause" or following a change in control on December 31, 2013, Dr. Singh would have been entitled to receive a severance payment of \$350,000 and health insurance benefits of \$3,600 (representing the family health benefit payments for a twelve-month period).

Elma Hawkins, PhD, MBA. Dr. Hawkins entered into an employment agreement with us on August 21, 2014 pursuant to which she agreed to serve as our President and Chief Operating Officer. From February 2014 until she agreed to become our President and Chief Operating Officer, Dr. Hawkins served as our head of clinical development under a consulting agreement. Under the new employment, we agreed to pay Dr. Hawkins an annual salary of \$325,000, the same amount that she was paid under the consulting agreement. As our President and Chief Operating Officer, Dr. Hawkins is also entitled to a year-end incentive bonus of up to 20% of her base salary. Effective as of August 21, 2014, we granted Dr. Hawkins a stock option to purchase 125,000 shares of our common stock (the "New Option") at an exercise price of \$6.70, which price is equal to the fair market value of our common stock on that date. Provided that she is still employed with us on the following dates, the New Option will vest in three installments as follows: (i) The right to purchase 41,667 shares shall vest on August 21, 2015; and the remaining shares shall vest quarterly over the next two years after August 21, 2015. Under February 2014 consulting agreement, Dr. Hawkins was granted a non-qualified stock option to purchase an aggregate of 200,000 shares of our common stock (the "Existing Option"), and 200,000 shares of restricted common stock. Accordingly, in addition to the 200,000 restricted shares, in the aggregate Dr. Hawkins currently has options for the purchase of 325,000 shares. The Existing Option and the 200,000 restricted shares remain in effect under the new employment agreement under the same terms under which they were granted in February 2014. Provided that Dr. Hawkins is still providing services to us on the following dates, the shares under the Existing Option that she received under the consulting agreement will vest in installments as follows: (i) The option to the purchase of 66,666 shares shall vest on February 21, 2015; and (ii) the remaining shares under the option shall vest in eight equal quarterly (three month) installments over the next two years after February 21, 2015. Provided that she is still providing services to us on the following dates, the 200,000 shares of restricted stock will vest in three installments as follows: (i) 40,000 shares shall vest on February 28, 2015; (ii) 60,000 shares shall vest on February 28, 2016, and (iii) 100,000 shares shall vest on February 28, 2017.

Either party can terminate the employment at any time; provided, however, that if we terminate Dr. Hawkins' employment agreement without cause (as defined in the employment agreement), all of her unvested stock options and unvested shares of restricted stock will become fully vested, and she shall have twelve months from the date of termination within which to exercise her vested options. In addition, Dr. Hawkins will be eligible to receive a severance payment equal to six months of her then base salary. If, within six months immediately preceding a Change in Control (as defined in his employment agreement) or within 12 months immediately following a Change of Control, Dr. Hawkins' employment is terminated by us for any reason other than cause, then Dr. Hawkins' unvested stock options and shares of restricted stock will immediately vest and she will be entitled to receive a severance payment equal to six months of her then base salary. Had the employment agreement been terminated by us without "cause" or following a change in control on as of the date of this prospectus, Dr. Hawkins would have been entitled to receive a severance payment of \$162,500 and health insurance benefits of \$9,960 (representing the family health benefit payments for a twelve-month period).

Michael Handelman. On May 15, 2014 we entered into a new employment agreement with Michael Handelman pursuant to which Mr. Handelman will continue to serve as our Chief Financial Officer. Under his employment agreement, Mr. Handelman will continue to receive his current annual salary of \$180,000 and will be entitled to participate in any pension, retirement, disability, insurance, medical service, or other employee benefit plan that is generally available to all employees of the company.

Effective as of May 15, 2014, we granted Mr. Handelman (i) a five-year stock option to purchase an aggregate of 75,000 shares of the Company's common stock, and (ii) 75,000 shares of restricted common stock. The stock options have an exercise price of \$7.95 per share, the fair market value of the common stock on May 15, 2014. Provided that Mr. Handelman is still employed with the Company on the following dates, the foregoing stock options will vest as follows: Options for the purchase of 25,000 shares shall vest on May 15, 2015; and after May 15, 2015 the remaining shares shall vest in equal quarterly installments over the next two years. Furthermore, provided that Mr. Handelman is still employed with the Company on the following dates, the foregoing 75,000 shares of restricted stock will vest in three installments as follows: (i) 25,000 shares shall vest on May 15, 2015; provided, however, that this vesting date would be accelerated if the Company has timely filed the quarterly reports of Form 10-Q for the fiscal quarters ended March 31, 2014 and June 30, 2014; and (ii) 25,000 shares shall vest on May 15, 2016, and (iii) 25,000 shares shall vest on May 15, 2017. We did timely file the Forms 10-Q for the fiscal quarters ended March 31, 2014 and June 30, 2014 and, as a result, the first 25,000 share tranche of Mr. Handelman's restricted shares have vested.

Either party can terminate the employment agreement and Mr. Handelman's employment without cause at any time. Upon termination of the employment agreement, except as otherwise provided in the Agreement, the unvested options and the unvested shares of restricted stock will be forfeited and returned to the Company, however, if we terminate Mr. Handelman's employment without cause (as defined in the agreement) any of Mr. Handelman's unvested stock options and unvested shares of restricted stock will become fully vested, and he shall have twelve months from the date of termination within which to exercise his vested options. Furthermore, if we terminate the employment agreement without cause, Mr. Handelman will be eligible to receive a severance payment equivalent to six months of his then base salary.

James Bender. Dr. Bender, our Vice President--Manufacturing, entered into an employment agreement with us effective as of January 6, 2014. Under the employment, we paid Dr. Bender a \$30,000 signing bonus on January 6, 2014, and agreed to pay him an annual salary of \$210,000. Dr. Bender also is entitled to a year-end incentive bonus of up to 25% of his base salary. Effective as of January 6, 2014, we granted Dr. Bender (i) stock options to purchase an aggregate of 100,000 shares of our common stock, and (ii) 100,000 shares of restricted common stock. The stock options have an exercise price of \$9.60, the fair market value of the common stock on January 6, 2014. Provided that he is still employed with us on the following dates, the foregoing stock options will vest in three installments as follows: (i) Options for the purchase of 33,333 shares shall vest on January 6, 2015; and the remaining shares shall vest quarterly over the next two years after January 6, 2015. Provided that Dr. Bender is still employed with us on the following dates, the foregoing 100,000 restricted shares will similarly vest in three installments as follows: (i) 20,000 shares shall vest on September 30, 2014; (ii) 30,000 shares shall vest on September 30, 2015, and (iii) 50,000 shares shall vest on September 30, 2016. Either party can terminate the employment at any time; provided, however, that if we terminate the employment agreement without cause (as defined in the employment agreement), all of his unvested stock options and unvested shares of restricted stock will become fully vested, and he shall have twelve months from the date of termination within which to exercise his vested options. In addition, Dr. Bender will be eligible to receive a severance payment equivalent to six months of his then base salary. If, within six months immediately preceding a Change in Control (as defined in his employment agreement) or within 12 months immediately following a Change of Control, Dr. Bender's employment is terminated by us for any reason other than cause, then Dr. Bender's unvested stock options and shares of restricted stock will immediately vest and he will be entitled to receive a severance payment equal to six months of his then base salary. Had the Employment Agreement been terminated by us without "cause" or following a change in control on as of the date of this prospectus, Dr. Bender would have been entitled to receive a severance payment of \$105,000 and health insurance benefits of \$1,500 (representing the family health benefit payments for a twelve-month period).

Laszlo Radvanyi. Dr. Radvanyi entered into an employment agreement with us, effective as of June 23, 2014, to serve as our Chief Scientific Officer. Under the employment, we paid Dr. Radvanyi a \$20,000 signing bonus, and agreed to pay him an annual salary of \$250,000. Dr. Radvanyi also is entitled to a year-end incentive bonus of up to 25% of his base salary. Effective as of June 23, 2014, we granted Dr. Radvanyi (i) stock options to purchase an aggregate of 180,000 shares of our common stock, and (ii) 180,000 shares of restricted common stock. The stock options have an exercise price of \$6.51, the fair market value of the common stock on June 23, 2014. Provided that he is still employed with us on the following dates, the foregoing stock options will vest in three installments as follows: (i) Options for the purchase of 60,000 shares shall vest on June 23, 2015; and the remaining shares shall vest quarterly over the next two years after June 23, 2015. Provided that Dr. Radvanyi is still employed with us on the following dates, the foregoing 180,000 restricted shares will similarly vest in three installments as follows: (i) 36,000 shares shall vest on April 30, 2015; (ii) 54,000 shares shall vest on April 30, 2016, and (iii) 90,000 shares shall vest on April 30, 2017. We also agreed to reimburse Dr. Radvanyi for certain relocation expenses in connection with relocation from Texas to our new research facility in Tampa, Florida. Either party can terminate the employment at any time; provided, however, that if we terminate the employment agreement without cause (as defined in the employment agreement), any of his unvested stock options and unvested shares of restricted stock will become fully vested, and he shall have twelve months from the date of termination within which to exercise his vested options. In addition, Dr. Radvanyi will be eligible to receive a severance payment equivalent to six months of his then base salary. If, within six months immediately preceding a Change in Control (as defined in his employment agreement) or within 12 months immediately following a Change of Control, Dr. Radvanyi's employment is terminated by us for any reason other than cause, then Dr. Radvanyi's unvested stock options and shares of restricted stock will immediately vest and he will be entitled to receive a severance payment equal to six months of his then base salary. Had the Employment Agreement been terminated by us without "cause" or following a change in control on as of the date of this prospectus, Dr. Radvanyi would have been entitled to receive a severance payment of \$125,000 and health insurance benefits of \$7,200 (representing the family health benefit payments for a twelve-month period).

### **2011 Equity Incentive Plan**

As of October 14, 2011, we adopted our 2011 Equity Incentive Plan (the "2011 Plan"). Employees, directors, consultants and advisors of the Company are eligible to participate in the 2011 Plan. The 2011 Plan was adopted to encourage selected employees, directors, consultants and advisors to improve operations, increase profitability, accept or continue employment or association with the Company through the participation in the growth in value of the common stock of the Company. The 2011 Plan is to be administered by the Board of Directors or its Compensation Committee. The Board has delegated the administration of the 2011 Plan to our Compensation Committee.

The 2011 Plan initially had 180,000 shares of common stock reserved for issuance in the form of incentive stock options, non-qualified options, common stock, and grant appreciation rights. The 2011 Plan was not approved by our stockholders within the required one-year period following its adoption and, accordingly, no incentive stock options can be granted under that plan. In August 2013 our Board of Directors and a majority of our stockholders approved an amendment to increase the number of shares available under the 2011 Plan from 180,000 shares to 1,700,000 shares, and an amendment to increase the number options or other awards that can be granted to any one person during a twelve (12) month period from 50,000 shares to 300,000 shares. The foregoing amendment to the 2011 Plan became effective in September 2013. In August 2014, our Board further increased the size of the 2014 Plan by 200,000 shares to 1,900,000 shares. As of December 31, 2013, 1,456,250 shares were available for future grant under the 2011 Plan. As of the date of this prospectus, 76,250 shares were available for grant under the 2011 Plan.

**Options and SARs.** The exercise price of non qualified options and the base value of a stock appreciation right shall not be less than the fair market value of the common stock on the date of grant. The exercise price of an incentive stock option shall not be less than the fair market value of the stock covered by the option at the time of grant and in instances where a grantee possesses more than ten (10%) percent of the combined voting power of all classes of stock of the Company, the exercise price shall not be less than one hundred and ten (110%) percent of the fair market value of the common stock at the time of grant.

Options granted under the 2011 Plan may be exercisable in cumulative increments, or "vest," as determined by the Board. Our Board has the power to accelerate the time as of which an option may vest or be exercised.

Subject to certain exceptions, the maximum term of options and SARS under the 2011 Plan is ten years. Generally, Options and SARs awarded under the 2011 Plan generally will terminate ninety (90) days after termination of the participant's service.

**Restricted Stock Awards.** Our Board may issue shares of restricted stock under the 2011 Plan as a grant or for such consideration, including services, and, subject to the Sarbanes-Oxley Act of 2002, promissory notes, as determined in its sole discretion.

Shares of restricted stock acquired under a restricted stock purchase or grant agreement may, but need not, be subject to forfeiture to the Company or other restrictions that will lapse in accordance with a vesting schedule to be determined by our Board. In the event a recipient's employment or service with the Company terminates, any or all of the shares of common stock held by such recipient that have not vested as of the date of termination under the terms of the restricted stock agreement may be forfeited to the Company in accordance with such restricted stock agreement.

Rights to acquire shares of common stock under the restricted stock purchase or grant agreement shall be transferable by the recipient only upon such terms and conditions as are set forth in the restricted stock agreement, as the Board shall determine in its discretion, so long as shares of common stock awarded under the restricted stock agreement remains subject to the terms of the such agreement.

**Adjustment Provisions.** If any change is made to our outstanding shares of common stock without the company's receipt of consideration (whether through stock split, stock dividend, recapitalization, or other specified change in the capital structure of the Company), appropriate adjustments may be made in the class and maximum number of shares of common stock subject to the 2011 Plan and outstanding awards.

**Effect of Certain Corporate Events.** In the event of a liquidation, merger or consolidation or a sale of all or substantially all of the assets of the Company, any surviving or acquiring corporation may assume awards outstanding under the 2011 Plan or may substitute similar awards. Unless the stock award agreement otherwise provides, in the event any surviving or acquiring corporation does not assume such awards or substitute similar awards, then the awards will terminate if not exercised at or prior to such event. Our Board may, however, in its sole discretion declare all outstanding options, stock appreciation rights and other awards in the nature of rights that may be exercised to become fully vested and exercisable, and all restrictions on all outstanding awards to lapse, in each case as of such date as the Administrator may, in its sole discretion, declare. Our Board may discriminate among participants or among awards in exercising such discretion.

**Duration, Amendment and Termination.** The Board may suspend or terminate the 2011 Plan without stockholder approval or ratification at any time or from time to time. Unless sooner terminated, the 2011 Plan will terminate ten years from the date of its adoption by the Board, in October 2021. The Board may also amend the 2011 Plan at any time, and from time to time.

#### **2010 Stock Incentive Plan**

On March 29, 2010, our Board adopted the Genesis Biopharma, Inc. 2010 Equity Compensation Plan (the "2010 Plan") pursuant to which the Board reserved an aggregate of 35,000 shares of common stock for future issuance. The 2010 Plan provided for awards of incentive stock options, non-qualified stock options, rights to acquire restricted stock, rights to acquire unrestricted stock, and stock appreciation rights, or SARs, but since we did not obtain stockholder approval of the 2010 Plan within twelve (12) months after the date the Board adopted the 2010 Plan, incentive stock options could not be granted. Under the 2010 Plan, no option could have a term of more than 10 years from the date of grant and the exercise price of non-qualified options and the base value of a stock appreciation right shall not be less than the fair market value of the common stock on the date of grant. As of October 2011, when the 2011 Plan was adopted, options for the issuance of all 35,000 shares had been granted, and no shares were available for additional grants under the 2011 Plan.

#### **2014 Equity Incentive Plan**

On September 19, 2014, our Board adopted the Lion Biotechnologies, Inc. 2014 Equity Incentive Plan (the "2014 Plan"). Under the 2014 Plan, we can issue an aggregate of 2,350,000 shares of common stock for awards of incentive stock options, non-statutory stock options, rights to acquire restricted stock, and stock appreciation rights, or SARs. No awards have been granted under the 2014 Plan to date, and no shares of common stock may be used under the 2014 Plan unless the 2014 Plan is approved by our stockholders within 12 months after its adoption by the Board. The terms of the 2014 Plan are substantially similar to those of the 2011 Plan.

#### **Outstanding Equity Awards**

The following table sets forth outstanding equity awards held by our named executive officers as of December 31, 2013 under our 2010 Plan and 2011 Plan:

**2013 Outstanding Equity Awards at Fiscal Year-End**

Name	Number of Securities Underlying Unexercised Options (#)		Option Exercise Price (\$)	Option Expiration Date
	Exercisable	Unexercisable		
Anthony Cataldo Former President and Chief Executive Officer(2)	8,333(1)	11,668	\$ 125.00	10/14/2021
Merrill McPeak Former President and Chief Executive Officer(2)	5,000(3)	-0-	\$ 115.00	10/14/2021
	10,000(4)	30,000(4)	\$ 5.65	11/8/2023
Manish Singh Chief Executive Officer	-0-	-0-	-0-	--
Michael Handelman Chief Financial Officer and Treasurer	8,333(1)	11,668	\$ 125.00	10/14/2021

(1) These options vest in equal monthly installments over five years.

(2) Mr. Cataldo and Mr. McPeak have resigned and are no longer this company's President and Chief Executive Officer.

(3) These options vest in equal monthly installments over a one-year period.

(4) On November 18, 2013, Mr. McPeak was granted an option to purchase up to 40,000 shares. Options for 10,000 of these shares vested upon grant, with the remaining options vesting over the next quarterly periods.

**Option Exercises and Stock Vested**

There were no exercises of stock options by any of our named executive officers during 2013.

**Director Compensation**

The following table sets forth information concerning the compensation paid to all persons during 2013 who served as non-employee directors of this Company during 2013, for their services rendered as directors. The compensation of Chief Executive Officer and Chief Financial Officer is described in the Summary Compensation Table of Executive Officers. Executive officers who serve on our Board of Directors are not compensated for their services as directors.

Name(1)	Director Compensation Table				All Other Compensation (\$)	Total (\$)
	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)	Option Awards (\$)(1)			
Martin Schroeder(2)	\$ -0-	—	—	—	—	-0-
Dr. L. Stephen Coles(2)	\$ 15,000	—	—	—	\$	15,000
Dr. William Andrews(2)	\$ 15,000	—	—	—	\$	15,000
Paul Kessler(2)	-0-	\$ 667,660	—	—	\$	667,660
Merrill A. McPeak	\$ -0-	\$ 667,660	\$ 226,000(3)	—	\$	904,910
David Voyticky(2)	\$ -0-	\$ 667,660	—	—	\$	667,660
Sanford J. Hillsberg	\$ 11,250	—	\$ 226,000(3)	—	\$	237,250
Jay Venkatesan	\$ 11,250	—	\$ 226,000(3)	—	\$	237,250

(1) Represents the grant date value computed in accordance with FASB ASC Topic 718.

(2) No longer is a director on our Board of Directors.

(3) On November 18, 2013, each non-executive director was granted an option to purchase up to 40,000 shares at an exercise price of \$5.65 per share (the closing price of our common stock on the date of grant). Options for 10,000 of these shares vested upon grant, with the remaining options vesting over the next quarterly periods. These options have a ten-year term and will be exercisable for two years following termination of service as a member of our Board of Directors, unless the Director is terminated for a cause, in which case the options are terminated.

On July 24, 2013, we entered into a Director Stock Award Agreement with each of General Merrill McPeak, Matrix Group International, Inc. (on behalf of David Voyticky) and Bristol Capital Advisors, LLC (on behalf of Paul Kessler) whereby General McPeak, Matrix and Bristol each received 133,532 shares of common stock for consideration of services rendered as directors. Mr. Voyticky and Mr. Kessler no longer are directors of this company.

Under our director compensation plan that was adopted in November 18, 2013, each director who is not an employee will receive the following cash compensation for service on our Board of Directors and committees of our Board of Directors during 2013-2014:

- an annual retainer fee of \$25,000 for each director, payable quarterly,
- an annual retainer fee of \$10,000 for the chairperson of each Committee of our Board of Directors, payable quarterly,
- a fee of \$2,500 per board meeting attended by the director in person,
- a fee of \$1,500 per board meeting attended by the director telephonically, and
- a fee of \$1,500 per committee meeting attended by the director.

### **Indemnification of Directors and Officers**

We have entered into indemnification agreements with each of our directors and executive officers. These agreements, among other things, require us to indemnify each director and executive officer to the fullest extent permitted by Nevada law, including indemnification of expenses such as attorneys' fees, judgments, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in the right of us, arising out of the person's services as a director or executive officer.

Our Amended and Restated Articles Certificate of Incorporation provides that, to the full extent permitted by the Nevada law, there shall be no personal liability of a director or an officer to this company or its stockholders for damages for breach of fiduciary duty as a director or an officer.

Our Amended and Restated Certificate of Incorporation also provides that, subject to the requirements of applicable Nevada law requiring mandatory indemnification, if any, this company shall indemnify, to the maximum extent permitted by Nevada law any person who was or is a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, except an action by or in the right of the company, by reason of the fact that such person is or was a director or officer of this company, or such person is or was serving at our request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner that he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than employment agreements with our executive officers, and other payments made to our executive officers, all as described above under the section entitled “Executive Compensation—Compensation of Executive Officers,” and compensation paid to directors as described above in the section titled “Executive Compensation--Director Compensation,” the following is a description of transactions since January 1, 2013, to which we have been a party in which (i) the amounts involved exceeded or will exceed \$120,000, and (ii) our directors and executive officers or holders of more than 5% of our common stock, or any member of the immediate family of the foregoing persons or entities affiliated with them, had or will have a direct or indirect material interest.

Emmes Group Consulting LLC. Effective as of February 15, 2011, we entered into a consulting agreement with Emmes Group Consulting LLC, a strategic business consulting firm (“Emmes”). Mr. Schroeder is an Executive Vice President and Managing Director of Emmes and the Emmes Group, Inc. Mr. Schroeder was a director of this company from June 13, 2011 until May 20, 2013.

Under the consulting agreement, Emmes agreed to assist and advise us with respect to the development of an overall strategic business plan, the identification of in-licensing therapeutic opportunities, and raising debt and equity capital. In consideration for the foregoing consulting services, we issued to Emmes a ten-year warrant to purchase up to 1,000 shares of our common stock at an exercise price of \$126.00 per share. In addition, we agreed to pay Emmes \$10,000 per month. Effective August 1, 2011, we amended the consulting agreement to increase the monthly consulting fee to \$20,000, commencing as of July 11, 2011. In 2011, we have paid Emmes a total of \$150,000 in consulting fees (in addition to the grant of the warrant for the purchase of 1,000 shares).

On February 12, 2012, we entered into a Second Amendment to the Consulting Agreement engaging the Emmes Group as our senior contractor and project manager responsible for the overall management of the design, development, implementation, and installation of our corporate and regulatory compliant information technology infrastructure and systems. Under the Second Amendment, the consulting fee increased from \$20,000 per month to \$60,000 per month. In 2012, we paid Emmes a total of \$240,000.

As of November 14, 2013, we owed Emmes \$164,746. On November 14, 2013 we settled the foregoing outstanding amount by paying Emmes \$116,000, and we no longer have any further obligations to Emmes.

Anthony Cataldo. Anthony Cataldo was our Chief Executive Officer from February 7, 2011 until his formal resignation on June 19, 2013. Mr. Cataldo also was the Chairman of our Board of Directors from February 7, 2011 until May 22, 2013. On June 19, 2013, we entered into a Settlement Agreement and General Release of All Claims (the “Settlement Agreement”) with Anthony Cataldo. Under the Settlement Agreement, Mr. Cataldo voluntarily resigned as our Chief Executive Officer, effective as of June 1, 2013, and we agreed to pay him a cash payment of \$370,000 when we obtain financing of more than \$5,000,000. The \$370,000 was to be paid as follows: (a) a payment of \$120,000, less all appropriate federal and state income and employment taxes, would be paid in cash, and (b) another payment of \$250,000, less all appropriate federal and state income and employment taxes, would be reinvested by us on Mr. Cataldo’s behalf in the securities to be sold in the next financing, on the same terms and conditions. The Settlement Agreement also provided for mutual releases of all claims related in any way to the transactions or occurrences between Mr. Cataldo and this company to the fullest extent permitted by law, including, but not limited to, his employment with us. Since we raised more than \$5,000,000 in the November 5, 2013 Private Placement, the foregoing \$370,000 payment was due after the closing of the Private Placement. On November 18, 2013, we revised the terms of the Settlement Agreement and paid Mr. Cataldo \$250,000 in cash as payment in full for all amounts owed to him under the Settlement Agreement.

Bristol Capital Advisors, LLC. Effective July 15, 2011, we entered into a consulting agreement with Bristol Capital Advisors, LLC, a strategic business consulting firm. Bristol Capital Advisors, LLC is affiliated with Bristol Investment Fund, Ltd., an entity that beneficially owned more than 5% of our common stock. Under the consulting agreement, Bristol Capital Advisors, LLC agreed to assist us with general corporate activities including but not limited to strategic and financial planning; management and business operations; financial projections and investor presentation materials; and any other consulting or advisory services. In consideration for the foregoing services, we issued to Bristol Capital Advisors, LLC a five-year warrant to purchase up to 15,000 shares of common stock at an exercise price of \$150.00 per share. This warrant contained full ratchet anti-dilution protection for any sales of common stock, or common stock equivalents, at a price of less than \$150.00 per share and could be exercised on a cash-less basis after July 15, 2012. Effective September 1, 2011, we entered into an addendum to the consulting agreement with Bristol Capital Advisors, LLC to pay Bristol Capital Advisors, LLC an additional \$100,000 in cash.



On May 22, 2013, both Bristol Investment Fund, Ltd. and Bristol Capital Advisors, LLC (collectively, "Bristol") participated in the Restructuring that was completed on May 22, 2013. In the Restructuring, Bristol converted approximately \$2.92 million of senior secured promissory notes and other indebtedness (including accrued interest and penalties) into shares of our common stock, purchased additional shares of common stock for \$1.00 per share, received additional shares for no additional consideration, and exchanged warrants for the purchase of 45,325 shares of capital stock into shares of Common Stock. For the foregoing, Bristol collectively received 3,140,217 shares of our common stock.

Paul Kessler, the founder and manager of Bristol, was a director on our Board of Directors from May 24, 2013 until September 3, 2013. On July 24, 2013, we entered into a Director Stock Award Agreement with each of our directors and with Bristol Capital Advisors, LLC (on behalf of Paul Kessler) whereby each of those directors and Bristol Capital Advisors, LLC each received 133,532 shares of common stock for consideration of services rendered as directors.

Manish Singh and Sanford J. Hillsberg. Manish Singh currently is our Chief Executive Officer and the Chairman of our Board of Directors, and Sanford J. Hillsberg currently is a director. Messrs. Singh and Hillsberg also owned all of the capital stock of Lion Biotechnologies, Inc., a Delaware corporation ("Lion Delaware"). On July 24, 2013, through a merger with our wholly-owned subsidiary, we acquired Lion Delaware. The purpose of the acquisition was to acquire access to technical and managerial resources to build our current and future products, which we believed would enhance or future operations and enable us to obtain additional funding. In the merger, Messrs. Singh and Hillsberg received, in exchange for all of their issued and outstanding shares of Lion Delaware's common stock, an aggregate of 1,340,000 shares of our common stock, as well as the ability to receive an additional 1,350,000 shares of our common stock upon the achievement of two milestones related to our financial performance and position. The Private Placement and the subsequent trading activity of our common stock satisfied the two milestones and, accordingly, in November 2013 and December 2013 we issued the remaining 1,350,000 earn-out shares of common stock to Messrs. Singh and Hillsberg. As part of the Merger, Dr. Manish Singh entered into an employment agreement with us whereby we appointed him as our Chief Executive Officer and Chairman of the Board of Directors. Mr. Hillsberg also was appointed as one of our directors in connection with the merger.

On November 5, 2013, Manish Singh invested in the Private Placement and purchased \$250,000 of common stock and warrants on the same terms and conditions as all other investors. Herbert Hillsberg, Sanford Hillsberg's father, also invested in the Private Placement and purchased \$50,000 of our common stock and warrants.

Merrill A. McPeak. Merrill A. McPeak has been a director of this company since July 20, 2011. General McPeak also was our interim Chief Executive Officer from January 14, 2013 until July 24, 2013. On January 31, 2013, General Merrill McPeak loaned us \$200,000 at an interest rate of 18% per annum. In connection with the Restructuring that was effected on May 22, 2013, General McPeak's loan, including accrued interest, was exchanged for 212,800 shares of our common stock (at an exchange price of \$1.00 per share).

Merrill McPeak also invested in the November 5, 2013 Private Placement and purchased \$50,000 of our common stock and warrants on the same terms and conditions as all other investors.

#### **SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT**

The following table sets forth certain information regarding the beneficial ownership of our common stock as of September 26, 2014 by (i) each person who is known by us to own more than 5% of either the outstanding common stock; (ii) each of our directors; (iii) each of the named executive officers; and (iv) all of our current executive officers and directors as a group. As of September 26, 2014, a total of 27,432,850 shares of common stock were outstanding. The shares of Series A Preferred do not have voting rights.

Name and Address of Beneficial Owner (1)	Common Stock	
	Number of Shares	Percent of Class (2)
Ayer Capital Management LP (3) 616 Corporate Way, Suite 2-4931 Valley Cottage, NY 10989	5,604,011	20.6%
Bristol Investment Fund Ltd. (4) Bristol Capital Advisors, LLC 10690 Wilshire Boulevard, Suite 1050 Los Angeles, CA 90024	3,998,732	14.7%
FMR LLC 245 Summer Street Boston, MA 02210 (12)	2,311,793	8.5%
Perceptive Life Sciences Master Fund Ltd. 499 Park Avenue, 25th Floor New York, NY 10022	2,719,548(13)	9.9%(13)
Joseph Edelman Perceptive Advisors LLC 499 Park Avenue, 25th Floor New York, NY 10022	2,914,548(14)	10.7%(14)
Manish Singh	2,671,000(5)	9.8%
Jay Venkatesan	5,634,011(6)	20.6%
Michael Handelman	75,000(7)	0.3%
Merrill A. McPeak	481,432(8)	1.8%
Sanford J. Hillsberg	299,000(9)	1.1%
James G. Bender	100,000(10)	*
Laszlo Radvanyi	180,000(10)	*
Elma Hawkins	200,000(10)	*
All directors and executive officers as a group (8 persons)	9,640,443(11)	35.0%

\* Less than 1%.

- (1) Unless otherwise indicated, the address of each of the persons shown is c/o Lion Biotechnologies, Inc., 21900 Burbank Boulevard, 3<sup>rd</sup> Floor, Woodland Hills, California 91367.
- (2) Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Shares of common stock subject to options, warrants and convertible securities currently exercisable or convertible, or exercisable or convertible within 60 days, are deemed outstanding, including for purposes of computing the percentage ownership of the person holding such option, warrant or convertible security, but not for purposes of computing the percentage of any other holder.
- (3) Based on a Schedule 13G filed with the SEC on June 3, 2013 by Ayer Capital Management, LP, ACM Capital Partners, LLC, Jay Venkatesan, Ayer Capital Partners Master Fund, L.P. and Ayer Capital Partners, LLC. Jay Venkatesan is the Managing Member of ACM Capital Partners, LLC and Ayer Capital Partners Master Fund, L.P.
- (4) Based on a Schedule 13D/A filed with the SEC on February 20, 2014 and subsequent information these stockholders provided to us, Bristol Investment Fund, Ltd. owns 3,998,732 shares and Bristol Capital Advisors, LLC owns no shares. Paul Kessler, as manager of the investment advisor to Bristol Investment Fund, Ltd. ("BIF") and the manager of Bristol Capital Advisors, LLC, has power to vote and dispose of the shares owned by these funds. Mr. Kessler disclaims beneficial ownership of the shares owned by BIF.
- (5) Represents 2,546,000 shares of common stock, and a Warrant to purchase 125,000 shares of common stock.
- (6) Represents the 5,604,011 shares owned by Ayer Capital Management LP described in footnote (3) above, plus options to purchase 30,000 shares of common stock that are exercisable currently or within 60 days of September 11, 2014. Jay Venkatesan is the Managing Member of ACM Capital Partners, LLC and Ayer Capital Partners Master Fund, L.P.
- (7) Consists of 25,000 shares he owns and 50,000 shares of restricted stock that are subject to forfeiture.
- (8) Represents 396,432 shares of common stock, 50,000 shares of common stock issuable upon exercise of Warrants purchased in the Private Placement, and options to purchase 35,000 shares of common stock that are exercisable currently or within 60 days of September 11, 2014.
- (9) Represents 269,000 shares of common stock and options to purchase 30,000 shares of common stock that are exercisable currently or within 60 days of September 11, 2014.
- (10) Represents shares of restricted stock that are currently subject to forfeiture.
- (11) Includes options and warrants to purchase 270,000 shares of common stock that are exercisable currently or within 60 days of September 11, 2014.

- (12) Based on a Schedule 13G filed with the SEC on June 10, 2014 by FMR LLC. Edward C. Johnson 3d is a Director and the Chairman of FMR LLC and Abigail P. Johnson is a Director, the Vice Chairman and the President of FMR LLC. Members of the family of Edward C. Johnson 3d, including Abigail P. Johnson, 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.
- (13) Does not include the (i) 97,000 shares of common stock issuable upon conversion of 194 shares of Series A Preferred or (ii) 2,805,000 shares of common stock issuable upon the exercise of the Warrants that Perceptive Life Sciences Master Fund Ltd. purchased in the Private Placement. Under the terms of the Series A Preferred and the Warrants, Perceptive Life Sciences Master Fund Ltd. is prohibited from exercising its Warrants for 2,805,000 shares of common stock if such exercise would result in it owning beneficially more than 4.99% of the outstanding shares of our common stock as determined under Section 13(d) of the Securities Exchange Act of 1934 (as it is permitted to do, Perceptive Life Sciences Master Fund Ltd. has opted to increase the foregoing beneficial ownership limitation to 9.99%).
- (14) Perceptive Advisors LLC is the advisor of Perceptive Life Sciences Master Fund Ltd. and Titan-Perc Ltd., and Mr. Edelman is the managing member of Perceptive Advisors LLC. Titan-Perc Ltd. beneficially owns 195,000 shares of common stock and a Warrant to purchase 195,000 additional shares of common stock. Mr. Edelman and Perceptive Advisors LLC are deemed to beneficially own the shares of Perceptive Life Sciences Master Fund Ltd. and Titan-Perc Ltd. Does not include the (i) 97,000 shares of common stock issuable upon the conversion of 194 shares of Series A Preferred or 2,805,000 shares of common stock issuable upon the exercise of the Warrants that Perceptive Life Sciences Master Fund Ltd. owns, or (ii) the 195,000 shares issuable upon the exercise of the Warrant that Titan-Perc Ltd. owns.

## SELLING STOCKHOLDERS

### Selling Stockholders Table

This prospectus covers an aggregate of 20,989,625 shares of our common stock, consisting of (i) 7,010,403 outstanding shares of common stock, (ii) 2,847,000 shares issuable upon the conversion of the Series A Preferred, (iii) 10,546,408 shares issuable upon the exercise of the Warrants, and (iv) 585,814 shares of common stock issuable upon the exercise of the common stock purchase warrants that we issued to the placement agents who participated in the Private Placement. The foregoing outstanding shares of common stock, Series A Preferred and Warrants were issued under the Securities Purchase Agreement in the Private Placement.

We are registering the shares of common stock in accordance with the terms of a Registration Rights Agreement we entered into with the selling stockholders as part of the Private Placement in order to permit the selling stockholders to offer the shares of common stock for resale from time to time. The selling stockholders may from time to time offer and sell pursuant to this prospectus any or all of the below listed shares of common stock owned by them. The registration of these shares does not require that any of the shares be offered or sold by the selling stockholders. The selling stockholders may from time to time offer and sell all or a portion of their shares in the over-the-counter market, in negotiated transactions, or otherwise, at prices then prevailing or related to the then current market price or at negotiated prices.

The registered shares may be sold directly or through brokers or dealers, or in a distribution by one or more underwriters on a firm commitment or best efforts basis. To the extent required, the names of any agent or broker-dealer and applicable commissions or discounts and any other required information with respect to any particular offer will be set forth in a prospectus supplement. Please see "Plan of Distribution." The selling stockholders and any agents or broker-dealers that participate with the selling stockholders in the distribution of registered shares may be deemed to be "underwriters" within the meaning of the Securities Act, and any commissions received by them and any profit on the resale of the registered shares may be deemed to be underwriting commissions or discounts under the Securities Act.

No estimate can be given as to the amount or percentage of common stock that will be held by the selling stockholders after any sales made pursuant to this prospectus because the selling stockholders are not required to sell any of the shares being registered under this prospectus. The following table assumes that the selling stockholders will sell all of the shares listed in this prospectus.

Additional selling security holders not named in this prospectus will not be able to use this prospectus for resales until they are named in the table below by prospectus supplement or post-effective amendment. Transferees, successors and donees of identified selling stockholders will not be able to use this prospectus for resales until they are named in the table below by prospectus supplement or post-effective amendment. If required, we will add transferees, successors and donees by prospectus supplement in instances where the transferee, successor or donee has acquired its shares from holders named in this prospectus after the effective date of this prospectus.

The following table sets forth the current beneficial ownership of the selling stockholders as reported to us by the selling stockholders. Initially, we registered 24,017,456 shares of our common stock for resale by the selling stockholders. The shares listed below represent the shares believed by us to be owned by the selling stockholders as of September 26, 2014, although the actual number of shares beneficially owned by some of the selling stockholders may be less than listed below. The term “selling stockholder” or “selling stockholders” includes the stockholders listed below and their respective transferees, assignees, pledges, donees or other successors. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Shares of common stock subject to options, warrants and convertible securities currently exercisable or convertible, or exercisable or convertible within 60 days are deemed outstanding, including for purposes of computing the percentage ownership of the person holding the option, warrant or convertible security, but not for purposes of computing the percentage of any other holder.

	Beneficial Ownership Before Offering			Beneficial Ownership After Offering <sup>(1)</sup>	
	Number of Shares	Percent	Number of Shares Being Offered	Number of Shares	Percent
Ronald Bartlett & Valerie Bartlett, JT WROS	75,000 <sup>(2)</sup>	*	75,000	0	0
Istvan Benko	10,000 <sup>(2)</sup>	*	10,000	0	0
Robbie Bensley	25,000 <sup>(2)</sup>	*	25,000	0	0
Nitin Bhatnagar	6,250 <sup>(2)</sup>	*	6,250	0	0
Kamilla Bjorlin	150,000 <sup>(2)</sup>	*	100,000	50,000	*
Neal Bloom & Frank Delillo	20,000 <sup>(2)</sup>	*	20,000	0	0
Anton Bogner & Barbara D. Bogner	45,300 <sup>(2)</sup>	*	45,000	300	*
Jay E. Bradbury	45,300 <sup>(2)</sup>	*	45,000	300	*
Larry Caillouet	25,000 <sup>(2)</sup>	*	25,000	0	0
Sudip Chakraborty & Anshu S. Chakraborty, JT WROS	90,000 <sup>(2)</sup>	*	9,000	0	0
Maida Chicon	5,000 <sup>(2)</sup>	*	5,000	0	0
Carol Cody	110,000 <sup>(2)</sup>	*	110,000	0	0
Gerald Cohen holds	62,500 <sup>(2)</sup>	*	62,500	0	0
Michael Crawford	80,000 <sup>(2)</sup>	*	80,000	0	0
Elizabeth Crothers	10,000 <sup>(2)</sup>	*	10,000	0	0
Karen Crothers & Arielle Crothers, JTIC	74,000 <sup>(2)</sup>	*	74,000	0	0
William A Crothers & JoAnn Crothers, JTWROS	5,300 <sup>(2)</sup>	*	5,300	0	0
DHS International Advisors LLC	25,500 <sup>(2)(18)</sup>	*	25,500	0	0
Steven Elias & Bessie Elias	19,000 <sup>(2)</sup>	*	19,000	0	0
Phylis M. Esposito	50,000 <sup>(2)</sup>	*	50,000	0	0
Ficksman Family Trust	25,000 <sup>(2)</sup>	*	25,000	0	0
Finkelstein Living Trust, William Finkelstein, Trustee	25,000 <sup>(2)</sup>	*	25,000	0	0
Stanley Friedman & Leslie Friedman JT WROS	25,000 <sup>(2)</sup>	*	25,000	0	0
Marc Fuhrman	25,000 <sup>(2)</sup>	*	25,000	0	0
Ruchir Gatha	87,000 <sup>(2)</sup>	*	87,000	0	0
The Rosalinde and Arthur Gilbert Foundation	100,000 <sup>(2)</sup>	*	100,000	0	0
Carol Giorello and Anthony Giorello, JTWROS	12,000 <sup>(2)</sup>	*	12,000	0	0
Martin Goldblum	46,000 <sup>(2)</sup>	*	46,000	0	0
William D. Gould	25,000 <sup>(2)</sup>	*	25,000	0	0
Gunn Trust DTD 4/20/1998, Charles K. Gunn, Trustee	6,250 <sup>(2)</sup>	*	6,250	0	0
Ravi Gutta	100,000 <sup>(2)</sup>	*	100,000	0	0
Estate of Herbert Hillsberg	50,000 <sup>(2)</sup>	*	50,000	0	0
Jennifer Nugent	50,000 <sup>(2)</sup>	*	50,000	0	0
Andrew Hodge	35,000 <sup>(2)</sup>	*	35,000	0	0
Andrei Iancu	32,500 <sup>(2)</sup>	*	32,500	0	0
Christofer Innace	70,000 <sup>(2)</sup>	*	70,000	0	0

	Beneficial Ownership Before Offering			Beneficial Ownership After Offering <sup>(1)</sup>		
	Number of Shares	Percent	Number of Shares Being Offered	Number of Shares	Percent	
Kevin Jacques	107,000	(2)	*	107,000	0	0
Ashish Jhingan	43,000	(2)	*	43,000	0	0
Ashish Jhingan & Dolly Jhingan JT WROS	7,000	(2)	*	7,000	0	0
Dolly Jhingan	16,520	(2)	*	16,520	0	0
Martin J. Junge	55,000	(2)	*	55,000	0	0
Narendra Kadaba	21,000	(2)	*	21,000	0	0
William Kadi	115,000	(2)	*	115,000	0	0
Peter Karp	16,000	(2)	*	16,000	0	0
Shruti Keerti	70,000	(2)	*	70,000	0	0
Behzad Kianmahd	25,000	(2)	*	25,000	0	0
Edward King	85,000	(2)	*	85,000	0	0
George A. Kingsley, Jr. and Nadine J. Kingsley JT WROS	58,000	(2)	*	58,000	0	0
Paul Frederick Lawrence and Rachelle Anne Lawrence, Trustees of the Rachelle and Paul Lawrence Living Trust, dated Aug. 1, 2008	25,000	(2)	*	25,000	0	0
Lazar Family Trust 4/15/92, Gary Lazar, Trustee	25,000	(2)	*	25,000	0	0
Thomas Leith	105,000	(2)	*	105,000	0	0
Jeffrey Lieberman	25,000	(2)	*	25,000	0	0
Robert H. Lipp Separate Property Trust	25,000	(2)	*	25,000	0	0
Daniel MacMullin	100,000	(2)	*	100,000	0	0
Richard M. Madison	18,900	(2)	*	18,900	0	0
Kevin McCormack	5,000	(2)	*	5,000	0	0
Ryan McCormack	5,000	(2)	*	5,000	0	0
Michael McFerrin Trust, a Revocable Trust, Michael McFerrin Trustee	25,000	(2)	*	25,000	0	0
Robert McGrath	9,000	(2)	*	9,000	0	0
Merrill McPeak	486,333	(3)	1.8%	100,000	386,433	1.4%
Dorice Melamed	25,000	(2)	*	25,000	0	0
Brian M. Miller	25,000	(2)	*	25,000	0	0
Anthony Naer	4,000	(2)	*	4,000	0	0
Daniel Nazarian	25,000	(2)	*	25,000	0	0
Nasser Nazarian	25,000	(2)	*	25,000	0	0
Rudolph Nisi	59,900	(2)	*	59,900	0	0
Kenneth E Normann	6,000	(2)	*	6,000	0	0
Vibha Patel	12,500	(2)	*	12,500	0	0
Vibha Patel LLC	75,000	(2)	*	75,000	0	0
Steven Pisacano	4,200	(2)	*	4,000	200	*
Platt Living Trust UA Oct. 5, 1990, Jeffrey S. Platt, Trustee	12,500	(2)	*	12,500	0	0
Prasad Family Trust UAD 08/18/11, Subir Prasad, Trustee	25,000	(2)	*	25,000	0	0

	Beneficial Ownership Before Offering			Beneficial Ownership After Offering <sup>(1)</sup>	
	Number of Shares	Percent	Number of Shares Being Offered	Number of Shares	Percent
R&I Family Trust u/a/d 3/15/90, Richard N. Kipper & Inta A. Kipper, Trustees	25,000	(2) *	25,000	0	0
Jeff Rennell & Christine Kellye Rennell, JT WROS	185,000	(2) *	185,000	0	0
Charles F. Richter	97,000	(2) *	97,000	0	0
Bruce Rosen	3,500	(2) *	3,500	0	0
Richard Salzer & Anca M. Cretan-Salzer JT WROS	5,000	(2) *	5,000	0	0
Bradley F. Schwartz	10,950	(2) *	10,950	0	0
Mark W. Schwartz	19,000	(2) *	19,000	0	0
Randall A. Sebring & Alice M. Sebring JT WROS	90,000	(2) *	90,000	0	0
Peter Selvin	85,000	(2) *	85,000	0	0
Howard L. Simon & Dana B. Simon as Trustees of the Howard and Dana Simon 2000 Revocable Trust	19,000	(2) *	19,000	0	0
Manish Singh	2,671,000	(4) 9.8%	250,000	2,421,000	8.9%
Sneh Singhal	45,000	(2) *	45,000	0	0
James Smith	20,000	(2) *	20,000	0	0
Daryl Squicciarini	60,000	(2) *	60,000	0	0
William Sykes	30,000	(2) *	30,000	0	0
Joseph Telushkin	26,000	(2) *	26,000	0	0
The Thunen Family Trust dated 10/4/05, Garret G. Thunen and Carol Thunen, Trustees	55,000	(2) *	55,000	0	0
Lisa Torsiello	50,000	(2) *	50,000	0	0
K. David Tritsch	10,000	(2) *	10,000	0	0
Ninish Ukkan	43,100	(2) *	43,100	0	0
Cynthia Warenik Serini	10,000	(2) *	10,000	0	0
Raymond Warenik	24,000	(2) *	24,000	0	0
Windward Venture Partners	25,000	(2)(17) *	25,000	0	0
Terry Wohlberg & David Wohlberg JT WROS	50,000	(2) *	50,000	0	0
Daniel Yankelevits	25,000	(2) *	25,000	0	0
Amir Zaghoul & Mona Zaghoul, JT WROS	27,000	(2) *	27,000	0	0
Leland Zurich & Valerie Zurich, JT WROS	66,000	(2) *	66,000	0	0
		*			
<b>Placement Warrants</b>		*			
James J. Cahill	4,804	(5) *	4,804	0	0
Barry Cohn	4,321	(5) *	4,321	0	0
Roth Capital Partners, LLC	544,369	(5)(16) 2.0%	544,369	0	0
Gregory R. Swenson	4,803	(5) *	4,803	0	0
OTA LLC	86,458	(5)(19) *	86,458	0	0

	Beneficial Ownership Before Offering			Beneficial Ownership After Offering <sup>(1)</sup>	
	Number of Shares	Percent	Number of Shares Being Offered	Number of Shares	Percent
<b>Series A Preferred Investors</b>					
Perceptive Life Sciences Master Fund Ltd.	5,621,549 <sup>(8)(20)</sup>	9.9% <sup>(21)</sup>	5,610,000	11,549	*
Titan-Perc Ltd.	390,000 <sup>(8)(21)</sup>	1.4%	390,000	0	0
Quogue Capital LLC	4,000,000 <sup>(6)(9)</sup>	4.9% <sup>(7)</sup>	4,000,000	0	0
Three Arch Opportunity Fund, LP	1,463,700 <sup>(10)(12)</sup>	4.9% <sup>(7)</sup>	1,462,500	1,200	*
Longwood Capital, LP	788,300 <sup>(11)(12)</sup>	2.9%	787,500	800	*
Broadfin Healthcare Master Fund, Ltd	1,500,000 <sup>(6)(13)</sup>	4.9% <sup>(7)</sup>	1,500,000	0	0
Mark H Rachesky	1,000,000	3.7%	1,000,000	0	0
Jason Stein	100,000	*	100,000	0	0
Michael Weiser	100,000	*	100,000	0	0
venBio Select Fund LLC	911,700 <sup>(14)</sup>	3.3% <sup>(7)</sup>	862,700	49,000	*
Doverhill Partners LLC	300,000 <sup>(15)</sup>	1.1%	300,000	0	0

\* Less than 1%

- (1) Assumes the selling stockholder sells all of the shares of common stock included in this prospectus.
- (2) Represents currently outstanding shares of common stock and shares of common stock issuable upon the exercise of the stockholder's Warrant issued in connection with the Offering.
- (3) Represents 396,432 shares of our common stock, 50,000 shares issuable upon the exercise of outstanding stock options, and 50,000 shares of our common stock issuable upon exercise of a Warrant.
- (4) Represents 2,671,000 shares of our common stock and 125,000 shares of our common stock issuable upon exercise of a Warrant.
- (5) Represents shares of common stock issuable upon exercise of warrants issued to broker-dealers as compensation for placement agent services provided in the Private Placement.

- (6) Represents shares of common stock issuable to the listed selling stockholder upon the conversion of that stockholder's Series A Preferred and the exercise of that stockholder's Warrants. One half of these shares are issuable upon the conversion of the Series A Preferred owned by the selling stockholder, and one half of the shares represent shares of common stock issuable upon the exercise of the stockholder's Warrant.
- (7) Under the terms of the Series A Preferred and the Warrants, these securityholders are prohibited from converting the shares of their Series A Preferred or exercising their Warrants if such conversion or exercise would result in them owning beneficially more than 4.99% of the outstanding shares of our common stock as determined under Section 13(d) of the Securities Exchange Act of 1934. As a result of these provisions, under the beneficial ownership rules of the SEC, none of these securityholders has beneficial ownership in excess of 4.99% of the outstanding shares of our common stock. However, the foregoing beneficial ownership limitation may be changed by the securityholders in their sole discretion to 9.99% upon notice to us.
- (8) Perceptive Advisors LLC is the advisor of Perceptive Life Sciences Master Fund Ltd. and Titan-Perc Ltd. Perceptive Advisors LLC and Joseph Edelman claim shared voting power and shared dispositive power over the 6,010,000 shares held by Perceptive Life Sciences Master Fund Ltd. and Titan-Perc Ltd. Mr. Edelman is the managing member of Perceptive Advisors LLC.
- (9) Quogue Capital LLC and Wayne P. Rothbaum claim shared voting power and shared dispositive power of the 4,000,000 shares. Mr. Rothbaum is the managing member of Quogue Capital LLC and so may be deemed to beneficially own such shares of common stock. Mr. Rothbaum disclaims such beneficial ownership.
- (10) Represents 488,700 shares of common stock and 975,000 shares of common stock issuable upon the exercise of the stockholder's Warrants.
- (11) Represents 263,300 shares of common stock and 525,000 shares of common stock issuable upon the exercise of the stockholder's Warrants.
- (12) Three Arch Opportunity Fund, LP, Longwood Capital, LP and Richard Lin claim shared voting power and shared dispositive power over the 2,252,000 shares held by Three Arch Opportunity Fund, LP and Longwood Capital, LP. Richard Lin and Longwood Capital Partners are investment managers of Three Arch Opportunity Fund, LP and of 2b LLC. Richard Lin and Longwood Capital Partners in their capacity as investment managers of Three Arch Opportunity Fund, LP, may also be deemed to have investment discretion and voting power over the shares held by Three Arch Opportunity Fund, LP and 2b LLC. 2b LLC owns 114,500 shares of currently outstanding common stock that are not included in this prospectus. Mr. Lin and Longwood Capital Partners disclaims any beneficial ownership of these shares.
- (13) Kevin Kotler in his capacity as investment manager of Broadfin Health Master Fund, Ltd., may also be deemed to have investment discretion and voting power over the shares held by that selling stockholder. Mr. Kotler disclaims any beneficial ownership of these shares.
- (14) Represents 386,700 shares of common stock and 525,000 shares of common stock issuable upon the exercise of the stockholder's Warrants. Kurt von Emster in his capacity as investment managers of venBio Select Fund LLC, may also be deemed to have investment discretion and voting power over the shares held by that selling stockholder. Mr. von Emster disclaims any beneficial ownership of these shares.
- (15) Brian Wornow in his capacity as investment manager of Doverhill Partners LLC, may also be deemed to have investment discretion and voting power over the shares held by that selling stockholder. Mr. Wornow disclaims any beneficial ownership of these shares.
- (16) Represents 100,000 shares of our common stock and 444,369 shares of our common stock issuable upon exercise of warrants issued for services provided in our private placement. Byron Roth and Gordon Roth, as members of the selling stockholder have shared voting and investment power over the shares.



- (17) Peter D. Kozlowski, the Managing Director of Windward Venture Partners, has investment discretion and voting power over the shares held by that selling stockholder.
- (18) Daniel Sigg is the manager and principal of DHS International Advisors LLC.
- (19) Ira Leventhal, a senior managing director of the selling stockholder OTA LLC, has investment discretion and voting power over the shares held by that selling stockholder.
- (20) Consists of (i) 2,719,549 shares of common stock currently owned, (ii) 97,000 shares of common stock issuable upon the conversion of 194 shares of Series A Preferred, and (iii) 2,805,000 shares of common stock issuable upon the exercise of the Warrants owned by Perceptive Life Sciences Master Fund Ltd. Under the terms of the Series A Preferred and the Warrants, Perceptive Life Sciences Master Fund Ltd. is prohibited from exercising its Warrants if such exercise would result in it owning beneficially more than 4.99% of the outstanding shares of our common stock as determined under Section 13(d) of the Securities Exchange Act of 1934 (as it is permitted to do, Perceptive Life Sciences Master Fund Ltd. has opted to increase the foregoing beneficial ownership limitation to 9.99%).
- (21) Represents 195,000 shares of our common stock and 195,000 shares of our common stock issuable upon exercise of a Warrant.

### **Relationships with Selling Stockholders**

All stockholders, other than those discussed below, are investors who acquired their securities in the Private Placements and who have had no position, office, or other material relationship (other than as purchasers of securities) with us or any of our affiliates within the past three years. Based on representations made to us by the selling stockholders, except as noted below, no selling stockholder is a registered broker-dealer or an affiliate of a registered broker-dealer.

Manish Singh is our Chief Executive Officer. See, “Executive Compensation—Employment Agreements,” above.

Merrill McPeak is a member of our Board of Directors. On July 24, 2013, General Merrill McPeak received 133,532 shares of common stock for consideration of services rendered as a director. In addition, on November 18, 2013, he was granted options to purchase additional shares, which options vest over a period of one year, and cash compensation that will be paid to him during the next year. See, “Executive Compensation--Director Compensation,” above.

Roth Capital Partners LLC acted as lead placement agent in the Private Placement, and Highline Research Advisors LLC a division of Agincourt, Ltd., and American Portfolio Financial Services, Inc. as the co-placement agents. As compensation for its services, these registered broker-dealers received cash compensation and warrants to purchase common stock. Roth Capital Partners, LLC received a Warrant to purchase 544,369 shares of common stock and \$896,608 of cash compensation. American Portfolio Financial Services, Inc., a registered broker-dealer, received \$172,844 and warrants to purchase 86,422 shares of common stock. Highline Research Advisors LLC, a registered broker-dealer, received a Warrant to purchase 96,065 shares, which Warrant it assigned to its affiliates, Jainal Bhuiyan (Warrant to purchase 8,646 shares), Marta Zylka (Warrant to purchase 8,646 shares), Theodore Kalem (Warrant to purchase 34,583 shares), Nickolay Kukekov (Warrant to purchase 34,583 shares), James J. Cahill (Warrant to purchase 4,804 shares), and Gregory R. Swenson (Warrant to purchase 4,803 shares). All of the shares of common stock underlying the foregoing warrants are included in this prospectus. Each of the foregoing broker-dealers, or affiliates of broker-dealers, received the warrants in the ordinary course of business for services rendered in the Private Placement, and at the time that these selling stockholders received the warrants, the selling stockholders had no agreements or understandings, directly or indirectly, with us, or to our knowledge with any other person, to distribute the warrants or the underlying securities.

Peter Selvin, William Gould, Istvan Benko, David Ficksman, Martin Goldblum, and David Wohlberg are attorneys at TroyGould PC, a law firm. TroyGould PC has, since February 2011, from time to time acted as one of this company’s corporate/securities law firms. These members of TroyGould PC purchased \$210,000 of common stock and Warrants in the Private Placement and are selling stockholders. In addition, Sanford J. Hillsberg, one of the directors on this company’s Board of Directors, also is an attorney at TroyGould PC.

In September 2013, we engaged Lidingo Holdings, LLC to provide media and financial relations services to us for a one-year period. Under the consulting agreement, as partial payment for the services to be rendered to us under the consulting agreement, we issued 50,000 shares to Lidingo Holdings LLC. The President of Lidingo Holdings, LLC made a \$100,000 investment in the Private Placement and is a selling stockholder.

The information in the above table is as of the date of this prospectus. Information concerning the selling stockholder may change from time to time and any such changed information will be described in supplements to this prospectus if and when necessary.

#### PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales effected after the date the registration statement of which this prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted by applicable law.

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

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

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering. Upon any exercise of the warrants by payment of cash, however, we will receive the exercise price of the warrants.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement or (2) the date on which all of the shares may be sold without restriction pursuant to Rule 144 of the Securities Act.

## DESCRIPTION OF SECURITIES

*The following is a summary of all material characteristics of our capital stock as set forth in our amended and restated articles of incorporation and bylaws, as amended. Copies of these documents are filed or incorporated by reference as exhibits to the registration statement, of which this prospectus forms a part.*

We are presently authorized to issue 150,000,000 shares of \$0.000041666 par value common stock and 50,000,000 shares of \$0.001 par value preferred stock. As of the date of this prospectus, we had 27,432,850 shares of common stock issued and outstanding and 5,694 shares of Series A Preferred issued and outstanding. There are no other series of shares of our preferred stock currently issued or outstanding.

### Common Stock

The holders of our common stock are entitled to equal dividends and distributions per share with respect to the common stock when, as and if declared by the Board of Directors from funds legally available therefore. No holder of any shares of common stock has a preemptive right to subscribe for any of our securities, nor are any common shares subject to redemption or convertible into other securities. Upon liquidation, dissolution or winding-up of our company, and after payment of creditors and preferred stockholders, if any, the assets will be divided pro rata on a share-for-share basis among the holders of the shares of common stock. All shares of common stock now outstanding are fully paid, validly issued and non-assessable. Each share of our common stock is entitled to one vote with respect to the election of any director or any other matter upon which stockholders are required or permitted to vote.

### Preferred Stock

Under our articles of incorporation, the Board of Directors has the power, without further action by the holders of the common stock, to designate the relative rights and preferences of the preferred stock, and to issue the preferred stock in one or more series as designated by the Board of Directors. The designation of rights and preferences could include preferences as to liquidation, redemption and conversion rights, voting rights, dividends or other preferences, any of which may be dilutive of the interest of the holders of the common stock or the preferred stock of any other series. The issuance of preferred stock may have the effect of delaying or preventing a change in control of the company without further stockholder action and may adversely affect the rights and powers, including voting rights, of the holders of the common stock.

In October 2013, we created a new class of preferred stock designated as Series A Convertible Preferred Stock (the "Series A Preferred"). The shares of Series A Preferred have a stated value of \$1,000 per share and are initially convertible into shares of common stock at a price of \$2.00 per share (subject to adjustment as described below). The rights of the Series A Preferred are set forth in the Certificate of Designation Of Preferences And Rights Of Series A Convertible Preferred Stock (the "Certificate of Designation"), which gives the holders of the Series A Preferred the following rights, preferences and privileges:

The Series A Preferred may, at the option of the holder, be converted at any time or from time to time into fully paid and non-assessable shares of common stock at the conversion price in effect at the time of conversion; provided, that a holder of Series A Preferred may at any given time convert only up to that number of shares of Series A Preferred so that, upon conversion, the aggregate beneficial ownership of the common stock (calculated pursuant to Rule 13d-3 of the Securities Exchange Act of 1934, as amended) of such holder and all persons affiliated with such holder, is not more than 4.99% of the common stock then outstanding (subject to adjustment up to 9.99% solely at the holder's discretion upon 60 days' prior notice). The number of shares into which one share of Series A Preferred shall be convertible is determined by dividing the stated value of \$1,000 per share by the initial Conversion Price. The "Conversion Price" per share for the Series A Preferred is initially equal to \$2.00 (subject to appropriate adjustment for certain events, including stock splits, stock dividends, combinations, recapitalizations or other recapitalizations affecting the Series A Preferred).

The Series A Preferred will automatically be converted into common stock at the then applicable Conversion Price (i) upon the written consent of the holders holding at least a majority of the outstanding shares of Series A Preferred or (ii) if required by us to be able to list our common stock on a national securities exchange; provided, any such conversions will continue to be limited by, and subject to the beneficial ownership conversion limitations set forth above.

Except as otherwise required by law, the holders of shares of Series A Preferred do not have the right to vote on matters that come before the stockholders; provided, that we may not, without the prior written consent of a majority of the outstanding Series A Preferred: (i) amend, alter, or repeal any provision of our Articles of Incorporation (including the Certificate of Designation) or Bylaws in a manner adverse to the Series A Preferred; (ii) create or authorize the creation of or issue any other security convertible into or exercisable for any equity security, having rights, preferences or privileges senior to or on parity with the Series A Preferred, or increase the authorized number of shares of Series A Preferred; (iii) issue or sell any equity or debt securities prior to November 5, 2014, subject to certain specified and other customary exceptions; or (iv) enter into any agreement with respect to any of the foregoing.

In the event of any dissolution or winding up of this company, whether voluntary or involuntary, the proceeds shall be paid pari passu among the holders of the shares of common stock and the Series A Preferred, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted to common stock.

We may not declare, pay or set aside any dividends on shares of any class or series of our capital stock (other than dividends on shares of common stock payable in shares of common stock) unless the holders of the Series A Preferred shall first receive, or simultaneously receive, an equal dividend on each outstanding share of Series A Preferred.

## **Warrants**

Each Warrant issued in the Private Placement entitles the holder thereof to purchase the number of shares of common stock purchased by such investor in the Private Placement or into the number of shares into which such investor's Series A Preferred is initially convertible. The Warrants are exercisable in whole or in part, at an initial exercise price per share of \$2.50, and may be exercised in a cashless exercise if, after six months, there is no effective registration statement registering, or no current prospectus available for, the resale of the Warrant shares. The exercise price and number of shares of common stock issuable under the Warrants are subject to adjustments for stock dividends, splits, combinations and similar events. The Warrants may be exercised at any time upon the election of the holder, beginning on the date of issuance and ending on the fifth anniversary of the date of issuance.

## **Rule 144**

In general, under Rule 144 as currently in effect, a person (or persons whose shares are aggregated) who has beneficially owned restricted securities for at least six months, including persons who may be deemed our "affiliates," as that term is defined under the Securities Act, would be entitled to sell such securities. Sales under Rule 144 are subject to the availability of current public information about the company. A person who has not been our affiliate at any time during the three months preceding a sale, and who has beneficially owned his shares for at least one year, would be entitled under Rule 144 to sell such shares without regard to any limitations under Rule 144.

As of the date of this prospectus, approximately 15,763,785 of our outstanding shares of common stock are eligible for public resale under Rule 144. The sale, or availability for sale, of substantial amounts of common stock could, in the future, adversely affect the market price of the common stock and could impair our ability to raise additional capital through the sale of our equity securities or debt financing. The future availability of Rule 144 to our holders of restricted securities would be conditioned on, among other factors, the availability of certain public information concerning the company.

## **Transfer Agent**

Our transfer agent currently is Corporate Stock Transfer, Inc., 3200 Cherry Creek South Drive, Suite 430, Denver, Colorado 80209.

### **DISCLOSURE OF SEC POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES**

Our Amended and Restated Articles of Incorporation provide to the maximum extent permitted under applicable law, there shall be no personal liability of a director or an officer to this corporation or its stockholders for damages for breach of fiduciary duty as a director or an officer. Our bylaws and Amended and Restated Articles of Incorporation also provide that we shall indemnify and hold harmless each person who serves at any time as a director or officer of this company from and against any and all claims, judgments and liabilities to which such person shall become subject by reason of the fact that he is or was a director or officer, and shall reimburse such person for all legal and other expenses reasonably incurred by him or her in connection with any such claim or liability. We also have the power to defend such person from all suits or claims in accordance with the Nevada Revised Statutes. The rights accruing to any person under our bylaws and Amended and Restated Articles of Incorporation do not exclude any other right to which any such person may lawfully be entitled, and we may indemnify or reimburse such person in any proper case, even though not specifically provided for by the bylaws and Amended and Restated Articles of Incorporation.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling this company pursuant to the foregoing provisions, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event a claim for indemnification against such liabilities (other than payment by us for expenses incurred or paid by a director, officer or controlling person of our company in successful defense of any action, suit, or proceeding) is asserted by a director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction, the question of whether such indemnification by it is against public policy in the Securities Act and will be governed by the final adjudication of such issue.

### **LEGAL MATTERS**

TroyGould PC, Los Angeles, California, has rendered an opinion with respect to the validity of the shares of common stock covered by this prospectus. Certain members, employees and of counsel of that firm beneficially own in the aggregate 526,000 shares and options or warrants to acquire shares of our common stock. The beneficial ownership of our shares described above includes all options that may be exercised within 60 days from the date of this prospectus.

### **EXPERTS**

Our financial statements for the years ended December 31, 2013 and December 31, 2012 and for the period September 17, 2007 (inception) to December 31, 2013 included in this prospectus and registration statement have been audited by Weinberg & Company, P.A. independent registered public accounting firm, as stated in their reports appearing herein, and are included in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 with respect to this offering of our common stock. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some items of which are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. Statements contained in this prospectus as to the contents of any contract, agreement or other document are summaries of the material terms of that contract, agreement or other document. With respect to each of these contracts, agreements or other documents filed or incorporated by reference as an exhibit to the registration statement, reference is made to the exhibits for a more complete description of the matter involved. A copy of the registration statement, and the exhibits and schedules thereto, may be inspected without charge at the public reference facilities maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. Copies of these materials may be obtained by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities. The SEC maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address of the SEC's website is <http://www.sec.gov>.

We file periodic reports and other information with the SEC. Such periodic reports and other information are available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at <http://www.lionbio.com>. You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information and other content contained on our website are not part of the prospectus.

**Lion Biotechnologies, Inc.**  
**(a Development Stage Company)**  
**Index to Financial Statements**

**Financial Statements for the Years Ended December 31, 2013 and December 31, 2012:**

	<b>Page</b>
Report of Independent Registered Public Accounting Firm	F-1
Balance Sheets as of December 31, 2013 and 2012	F-2
Statements of Operations for each of the two fiscal years in the period ended December 31, 2013 and December 31, 2012 and from September 17, 2007 (Inception) to December 31, 2013	F-3
Statements of Stockholders Equity (Deficit) for each of the years in the period from September 17, 2007 (Inception) to December 31, 2013	F-4
Statements of Cash Flows for each of the two years in the period ended and from September 17, 2007 (Inception) to December 31, 2013	F-5
Notes to Consolidated Financial Statements	F-6

**Unaudited Financial Statements for the Six Months Ended June 30, 2014:**

	<b>Page</b>
Condensed Balance Sheets as of December 31, 2013 and June 30, 2014 (unaudited)	F-22
Condensed Statements of Operations for the Three Months Ended June 30, 2014 (unaudited) and 2013 (unaudited) and Six Months Ended June 30, 2014 (unaudited) and 2013 (unaudited)	F-23
Condensed Statements of Stockholders Deficiency for the Six Months Ended June 30, 2014 (unaudited)	F-24
Condensed Statements of Cash Flows for the Six Months Ended June 30, 2014 (unaudited) and 2013 (unaudited)	F-25
Notes to Unaudited Condensed Financial Statements	F-26



## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors  
Lion Biotechnologies, Inc.  
Woodland Hills, California

We have audited the accompanying balance sheets of Lion Biotechnologies, Inc. (a development stage company) as of December 31, 2013 and 2012, and the related statements of operations, stockholders' equity (deficiency), and cash flows for the years then ended and for the period from September 17, 2007 (inception) to December 31, 2013. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Lion Biotechnologies, Inc. as of December 31, 2013 and 2012, and the results of their operations and their cash flows for the years then ended and for the period from September 17, 2007 (inception) to December 31, 2013, in conformity with accounting principles generally accepted in the United States of America.

WEINBERG & COMPANY, P.A.  
Los Angeles, California  
March 27, 2014

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**Balance Sheets**

	<u>December 31,</u> <u>2013</u>	<u>December 31,</u> <u>2012</u>
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash and cash equivalents	\$ 19,672,177	\$ -
Deposits	15,000	5,000
Prepaid expenses	158,716	2,275
<b>Total Current Assets</b>	<u>19,845,893</u>	<u>7,275</u>
<b>Property and equipment</b> , net of accumulated depreciation of \$16,002 and \$8,915	27,756	22,138
<b>Total Assets</b>	<u>\$ 19,873,649</u>	<u>\$ 29,413</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIENCY)</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 412,976	\$ 1,098,271
Accrued expenses	1,856,956	1,740,220
7% Senior secured convertible promissory notes	-	5,000,000
12% Secured promissory note	-	1,231,250
September 2012 secured promissory note	-	250,000
Accrued interest and penalty	-	2,029,148
<b>Total Current Liabilities</b>	<u>2,269,932</u>	<u>11,348,889</u>
<b>Commitments and contingencies</b>		
<b>Stockholders' Equity (Deficiency)</b>		
Preferred stock, \$0.001 par value; 50,000,000 shares authorized, 17,000 shares and no shares issued and outstanding, respectively	17	-
Common stock, \$0.000041666 par value; 150,000,000 shares authorized, 20,023,958 and 818,806 shares issued and outstanding, respectively	835	34
Common stock to be issued, 303,125 shares	245,153	245,153
Additional paid-in capital	81,884,897	19,119,532
Accumulated deficit	(64,527,185)	(30,684,195)
<b>Total Stockholders' Equity (Deficiency)</b>	<u>17,603,717</u>	<u>(11,319,476)</u>
<b>Total Liabilities and Stockholders' Equity ( Deficiency)</b>	<u>\$ 19,873,649</u>	<u>\$ 29,413</u>

The accompanying notes are an integral part of these financial statements.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**Statements of Operations**

	For the Years Ended December 31,		For the Period from September 17, 2007 (Date of Inception) through December 31,
	2013	2012	2013
<b>Revenues</b>	\$ -	\$ -	\$ -
<b>Costs and expenses</b>			
Operating expenses (including \$2,750,223, \$2,528,254 and \$10,138,952 of non-cash share-based compensation costs)	4,655,149	6,476,546	31,153,187
Cost of Lion transaction - related party	16,656,250	-	16,656,250
Research and development	1,329,367	1,656,000	4,912,412
Impairment of intangible asset	-	-	160,036
<b>Total costs and expenses</b>	<u>22,640,766</u>	<u>8,132,546</u>	<u>52,881,885</u>
<b>Loss from operations</b>	<u>(22,640,766)</u>	<u>(8,132,546)</u>	<u>(52,881,885)</u>
<b>Other income (expense)</b>			
Interest expense	(444,729)	(1,922,063)	(2,517,945)
Change in fair value of derivative liabilities	-	8,635,147	10,001,955
Amortization of discount on convertible notes	-	(497,888)	(5,497,888)
Cost to induce exchange transaction	(2,295,868)	-	(2,295,868)
Financing costs	-	(1,390,269)	(2,873,927)
<b>Total other income (expense)</b>	<u>(2,740,597)</u>	<u>4,824,927</u>	<u>(3,183,673)</u>
<b>Net Loss</b>	\$ (25,381,363)	\$ (3,307,619)	\$ (56,065,558)
Deemed dividend related to beneficial conversion feature of convertible preferred stock	(8,461,627)	-	(8,461,627)
<b>Net Loss Attributable to Common Stockholders</b>	<u>\$ (33,842,990)</u>	<u>\$ (3,307,619)</u>	<u>\$ (64,527,185)</u>
<b>Net Loss Per Share Attributable to Common Stockholders, Basic and Diluted</b>	<u>\$ (3.47)</u>	<u>\$ (4.14)</u>	
<b>Weighted-Average Common Shares Outstanding, Basic and Diluted</b>	<u>9,762,513</u>	<u>798,530</u>	

The accompanying notes are an integral part of these financial statements.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**Statements of Stockholders' Equity (Deficiency)**  
**For the Period from September 17, 2007 (Date of Inception) through December 31, 2013**

	Preferred Stock		Common Stock		Common Stock to Be Issued	Additional Paid-In Capital	Accumulated Deficit	Total Stockholders' Equity (Deficiency)
	Shares	Amount	Shares	Amount				
Initial capitalization, sale of common stock to directors, September 17, 2007			126,600	\$ 5		\$ 7,995	\$ -	\$ 8,000
Private placement, closed December 31, 2007			254,400	11		52,989	-	53,000
Net loss			-	-		-	(58,716)	(58,716)
<b>Balance - December 31, 2008</b>			381,000	16		60,984	(58,716)	2,284
Net loss			-	-		-	(15,772)	(15,772)
<b>Balance - December 31, 2009</b>			381,000	16		60,984	(74,488)	(13,488)
Common stock sold in private placement at \$0.03125 per share, March 2010			128,000	6		364,994	-	365,000
Common stock issued for intellectual property, March 2010			209,600	9		217,399	-	217,408
Common stock sold in private placement at \$0.75 per share, September 2010			9,333	0		700,000	-	700,000
Common stock sold in private placement at \$1.00 per share, October 2010			2,500	0		250,000	-	250,000
Common stock sold in private placement at \$1.00 per share, December 2010			5,950	0		595,000	-	595,000
Forgiveness of debt by director			-	-		18,137	-	18,137
Fair value of vested stock options			-	-		114,016	-	114,016
Net loss			-	-		-	(1,607,988)	(1,607,988)
<b>Balance - December 31, 2010</b>			736,383	31		2,320,530	(1,682,476)	638,085
Common stock sold in private placement at \$1.00 per share, January 2011			450	0		45,000	-	45,000
Common stock and warrant sold in private placement at \$1.00 per share, April to June 2011, net of fair value of warrant derivative			8,500	0		185,704	-	185,704
Common stock issued to consultants for services			4,602	0		498,452	-	498,452
Common stock returned for cancelation			(30,000)	(1)		1	-	-
Fair value of common stock issued to officer for services			60,000	3		8,009,997	-	8,010,000
Fair value of common stock transferred to officer			-	-		702,037	-	702,037
Fair value of common stock transferred from CEO to a director			-	-		1,040,000	-	1,040,000
Fair value of vested stock options and warrants			-	-		1,793,904	-	1,793,904
Net loss			-	-		-	(25,694,100)	(25,694,100)
<b>Balance - December 31, 2011</b>			779,936	\$ 33		\$ 14,595,625	(27,376,576)	(12,780,918)
Common stock sold in private placement at \$1.00 per share net of derivative liability, February 2012			2,500	0		67,919	-	67,919
Fair value of common stock issued to consultants for services			15,495	1		799,999	-	800,000
Fair value of common stock issued with notes payable recorded as a note discount			3,125	0	245,153	252,735	-	497,888
Fair value of common stock issued with notes payable			17,750	0		875,000	-	875,000

recorded as financing cost									
Fair value of vested stock options and warrants						2,528,254			2,528,254
Net loss							(3,307,619)		(3,307,619)
<b>Balance - December 31, 2012</b>			818,806	\$ 34	245,153	\$ 19,119,532	\$ (30,684,195)		\$ (11,319,476)
Common stock issued in settlement of notes payable and accrued interest and penalty			9,267,641	386		9,267,255			9,267,641
Common stock issued for cash under the restructuring, net of offering costs of \$109,990			1,350,000	57		1,239,953			1,240,010
Fair value of common stock issued for cancellation of outstanding warrants			122,734	5		122,729			122,734
Fair value of vested stock options and warrants						747,241			747,241
Common stock issued to induce exchange transaction			2,173,134	91		2,173,044			2,173,135
Common stock issued for Lion transaction			2,690,000	112		16,656,138			16,656,250
Common stock issued to directors			400,596	17		2,002,965			2,002,982
Common stock issued to consultants for services			50,000	2		273,998			274,000
Common stock sold in private placement at \$2.00 per share, November 2013, net of offering costs of \$403,797			3,145,300	131		5,886,672			5,886,803
Preferred stock sold in private placement at \$2.00 per share, November 2013, net of offering costs of \$1,091,240	17,000	17						15,908,743	
Common stock issued for settlement of payable			5,747					25,000	
Deemed dividend on beneficial conversion feature of preferred stock							8,461,627	(8,461,627)	
Net loss								(25,381,363)	(25,381,363)
<b>Balance - December 31, 2013</b>	<u>17,000</u>	\$ <u>17</u>	<u>20,023,958</u>	\$ <u>835</u>	<u>245,153</u>	\$ <u>81,884,897</u>	\$ <u>(64,527,185)</u>		\$ <u>17,603,717</u>

The accompanying notes are an integral part of these financial statements.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**Statements of Cash Flows**

	<b>For the Years Ended December 31,</b>		<b>September 17, 2007 (Date of Inception) through December 31, 2013</b>
	<b>2013</b>	<b>2012</b>	
<b>Cash Flows From Operating Activities</b>			
Net loss	\$ (25,381,363)	\$ (3,307,619)	\$ (56,065,558)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	7,087	6,211	77,373
Impairment of intangible asset	-	-	160,036
Fair value of vested stock options and warrants	747,241	2,528,254	5,183,415
Fair value of common stock and warrants accounted for as financing costs	-	-	2,986,819
Fair value of vested warrants granted for services	-	-	2,563,647
Amortization of discount on convertible notes	-	497,888	5,000,000
Private placement costs	-	515,273	385,000
Change in fair value of derivative liabilities	-	(8,635,147)	(10,001,955)
Common stock issued to officer for services	-	-	8,010,000
Common stock issued for services	274,000	800,000	1,572,452
Common stock issued to induce conversion of warrants	122,734	-	122,734
Common stock issued to induce exchange transaction	2,173,135	875,000	2,173,135
Common stock issued for Lion transaction	16,656,250	-	16,656,250
Common stock issued to directors	2,002,982	-	2,002,982
Fair value of common stock transferred to officer and director	-	-	1,742,037
Write off of advances to related party	-	-	50,000
Changes in assets and liabilities:			
Deposits, prepaid expenses and other assets	(166,441)	22,589	(173,716)
Accounts payable and accrued expenses	(543,560)	2,580,547	2,294,932
Accrued interest and penalty	445,743	1,875,537	2,474,891
<b>Net Cash Used In Operating Activities</b>	<b>(3,662,192)</b>	<b>(2,241,467)</b>	<b>(12,785,526)</b>
<b>Cash Flows From Investing Activities</b>			
Purchases of computer equipment	(12,705)	-	(47,757)
Advances to related party	-	-	(50,000)
<b>Net Cash Used In Investing Activities</b>	<b>(12,705)</b>	<b>-</b>	<b>(97,757)</b>
<b>Cash Flows From Financing Activities</b>			
Proceeds from the issuance of convertible notes, net	311,500	-	4,926,500
Proceeds from the issuance of secured promissory notes, net	-	1,481,250	1,481,250
Proceeds from the issuance of common stock, net	7,126,813	250,000	10,220,813
Proceeds from the issuance of preferred stock, net	15,908,760	-	15,908,760
Due to director	-	-	18,137
<b>Net Cash Provided By Financing Activities</b>	<b>23,347,073</b>	<b>1,731,250</b>	<b>32,555,460</b>
<b>Net Increase (Decrease) In Cash And Cash Equivalents</b>	<b>19,672,177</b>	<b>(510,217)</b>	<b>19,672,177</b>
<b>Cash and Cash Equivalents, Beginning of Period</b>	<b>-</b>	<b>510,217</b>	<b>-</b>
<b>Cash and Cash Equivalents, End of Period</b>	<b>\$ 19,672,177</b>	<b>\$ -</b>	<b>\$ 19,672,177</b>
<b>Supplemental Disclosures of Cash Flow Information:</b>			
Derivative liability recorded upon issuance of convertible notes and warrants	\$ -	\$ -	\$ 5,535,310
Derivative liability recorded as offering cost	\$ -	\$ 697,354	\$ 1,902,998
Common stock issued for intellectual property	\$ -	\$ -	\$ 217,408
Forgiveness of debt by director, treated as contribution of capital	\$ -	\$ -	\$ 18,137
Common stock issued upon conversion of convertible notes	\$ 6,792,750	-	\$ 6,792,750
Fair value of common stock issued with notes payable recorded as a note discount	\$ -	\$ 497,888	\$ 497,888
Settlement of accounts payable through issuance of common stock	\$ 25,000	\$ -	\$ 25,000
Common stock issued upon conversion of accrued interest and penalty	\$ 2,474,891	\$ -	\$ 2,474,891

The accompanying notes are an integral part of these financial statements.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

**NOTE 1. GENERAL ORGANIZATION AND BUSINESS**

Lion Biotechnologies, Inc. (the “Company,” “we,” “us” or “our”) was originally incorporated under the laws of the state of Nevada on September 17, 2007. Until March 2010, we were an inactive company known as Freight Management Corp. On March 15, 2010, we changed our name to Genesis Biopharma, Inc., and in 2011 we commenced our current business. On September 26, 2013, we amended and restated our Articles of Incorporation to, among other things, change our name to Lion Biotechnologies, Inc., effect a 1-for-100 reverse stock split (pro-rata reduction of outstanding shares) of our common stock, increase (after the reverse stock split) the number of our authorized number of shares of common stock to 150,000,000 shares, and authorize the issuance of 50,000,000 shares of “blank check” preferred stock, \$0.001 par value per share.

All common stock share and per share information contained in these financial statements has been adjusted to reflect the foregoing stock split as if it occurred at the earliest period presented.

Lion Biotechnologies, Inc. is an emerging biotechnology company focused on developing and commercializing adoptive cell therapy (ACT) using autologous tumor infiltrating lymphocytes (TILs) for the treatment of metastatic melanoma and other solid cancers. ACT utilizes T-cells harvested from a patient to treat cancer in that patient. TILs, a kind of anti-tumor T-cells that are naturally present in a patient’s tumors, are collected from individual patient tumor samples. The TILs are then activated and expanded *ex vivo* and then infused back into the patient to fight their tumor cells.

***Development Stage***

We are currently in the development stage. As a development stage company that is currently engaged in the development of therapeutics to fight cancer, we do not have any commercial products and have not yet generated any revenues from our biopharmaceutical business. We currently do not anticipate that we will generate any revenues during 2014 from the sale or licensing of any products. In addition, we have not generated any revenues from our prior business plans.

***Liquidity***

We have not had any revenues and are still in the development stage. As shown in the accompanying financial statements, we have incurred a net loss of \$25,381,000 for the year ended December 31, 2013 and used \$3,662,000 of cash in our operating activities during the year ended December 31, 2013. On November 5, 2013, in a private placement (the “Private Placement”), we issued and sold 3,145,300 shares of common stock, 17,000 shares of Series A Convertible Preferred Stock, and warrants to purchase 11,645,300 shares of common stock for an aggregate purchase price of \$23,290,600 in cash. The net proceeds of the Private Placement were approximately \$21,985,000. As a result of the foregoing financing, as of December 31, 2013, we had \$19,672,000 of cash or cash equivalents on hand, stockholders’ equity of \$17,604,000 and had working capital of \$17,576,000.

During 2014, we expect to further ramp up our operations, which will increase the amount of cash we will use in our operations. Our budget for 2014 includes increased spending on research and development activities, higher payroll expenses as we increase our professional staff, as well as ongoing payments under the Cooperative Research and Development Agreement (CRADA) we have entered into with the National Cancer Institute (NCI). Our budget anticipates that we will spend approximately \$8 million to \$10 million this year on budgeted expenditures, although that amount may change materially. Based on the funds we had available on December 31, 2013, we believe that we have sufficient capital to fund our anticipated operating expenses for at least twelve months.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

Despite the amount of funds that we raised in the Private Placement, the estimated cost of completing the development of our TIL-based therapy, and of obtaining all required regulatory approvals to market those product candidates, is substantially greater than the amount of funds we had available on December 31, 2013. Therefore, while we believe that our existing cash balances will be sufficient to fund our currently planned level of operations for at least twelve months, we will have to obtain additional funds in the future to complete our development plans. We intend to seek this additional funding through various financing sources, including possible sales of our securities, and in the longer term through strategic alliances with other pharmaceutical or biopharmaceutical companies.

**NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING PRACTICES**

***Loss per Share***

Basic earnings (loss) per share is computed by dividing the net income (loss) applicable to common stockholders by the weighted average number of shares of common stock outstanding during the period. Diluted earnings (loss) per share is computed by dividing the net income (loss) applicable to common stockholders by the weighted average number of common shares outstanding plus the number of additional common shares that would have been outstanding if all dilutive potential common shares had been issued. For the years ended December 31, 2013 and 2012, the calculations of basic and diluted loss per share are the same because inclusion of potential dilutive securities in the computation would have an anti-dilutive effect due to the net losses.

The potentially dilutive securities at December 31, 2013 consist of options to acquire 278,750 shares of the Company's common stock and warrants to acquire 12,373,156 shares of common stock.

***Fair Value Measurements***

The Company uses various inputs in determining the fair value of certain assets and liabilities and measures these on a recurring basis. Financial assets and liabilities recorded at fair value in the balance sheets are categorized by the level of objectivity associated with the inputs used to measure their fair value. Authoritative guidance provided by the Financial Accounting Standards Board (the "FASB") defines the following levels directly related to the amount of subjectivity associated with the inputs to fair valuation of these financial assets and liabilities:

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly.

Level 3—Unobservable inputs based on the Company's assumptions.

***Derivative Financial Instruments***

The Company evaluates all of its financial instruments to determine if such instruments are derivatives or contain features that qualify as embedded derivatives. The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is evaluated at the end of each reporting period. Derivative instrument liabilities are classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument could be required within twelve months of the balance sheet date.

For stock-based derivative financial instruments, the Company used probability weighted average Black-Scholes-Merton models to value the derivative instruments at inception and on subsequent valuation dates through March 31, 2013. At December 31, 2012, the Company used the assistance of a valuation specialist to determine the fair value of the derivative liability. On May 22, 2013, upon the completed restructuring of the Company's debt and equity securities ("financial instruments") (see Note 5), all financial instruments held at that time that were accounted for as a derivative liability were converted into shares of the Company's common stock.



**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

***Use of Estimates***

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

***Stock-Based Compensation***

The Company periodically issues stock options and warrants to employees and non-employees in non-capital raising transactions for services and for financing costs. The Company accounts for stock option and warrant grants issued and vesting to employees based on the authoritative guidance provided by the Financial Accounting Standards Board where the value of the award is measured on the date of grant and recognized over the vesting period. The Company accounts for stock option and warrant grants issued and vesting to non-employees in accordance with the authoritative guidance of the Financial Accounting Standards Board where the value of the stock compensation is determined based upon the measurement date as at either a) the date at which a performance commitment is reached, or b) at the date at which the necessary performance to earn the equity instruments is complete. Non-employee stock-based compensation charges generally are amortized over the vesting period on a straight-line basis. In certain circumstances where there are no future performance requirements by the non-employee, option grants are immediately vested and the total stock-based compensation charge is recorded in the period of the measurement date.

The fair value of the Company's common stock option grants are estimated using a Black-Scholes option pricing model, which uses certain assumptions related to risk-free interest rates, expected volatility, expected life of the common stock options, and future dividends. Compensation expense is recorded based upon the value derived from the Black-Scholes option pricing model, and based on actual experience. The assumptions used in the Black-Scholes option pricing model could materially affect compensation expense recorded in future periods.

***Recent Accounting Pronouncements***

The FASB has issued Accounting Standards Update (ASU) No. 2013-04, Liabilities (Topic 405), "Obligations Resulting from Joint and Several Liability Arrangements for Which the Total Amount of the Obligation Is Fixed at the Reporting Date." ASU 2013-04 provides guidance for the recognition, measurement, and disclosure of obligations resulting from joint and several liability arrangements for which the total amount of the obligation within the scope of this ASU is fixed at the reporting date, except for obligations addressed within existing guidance in U.S. GAAP. The guidance requires an entity to measure those obligations as the sum of the amount the reporting entity agreed to pay on the basis of its arrangement among its co-obligors and any additional amount the reporting entity expects to pay on behalf of its co-obligors. The amendments in this ASU are effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. The Company does not expect the adoption of this guidance to have a material impact on the Company's financial statements.

In July 2013, the FASB issued ASU 2013-11, Income Taxes (Topic 740): Presentation of Unrecognized Tax Benefit When a Net Operating Loss Carryforward, A Similar Tax Loss, or a Tax Credit Carryforward Exists (A Consensus the FASB Emerging Issues Task Force). ASU 2013-11 provides guidance on financial statement presentation of unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. The FASB's objective in issuing this ASU is to eliminate diversity in practice resulting from a lack of guidance on this topic in current U.S. GAAP. This ASU applies to all entities with unrecognized tax benefits that also have tax loss or tax credit carryforwards in the same tax jurisdiction as of the reporting date. This amendment is effective for public entities for fiscal years beginning after December 15, 2013 and interim periods within those years. The company does not expect the adoption of this standard to have a material impact on the Company's financial position and results of operations.

Other recent accounting pronouncements issued by the FASB (including its Emerging Issues Task Force), the AICPA, and the SEC did not or are not believed by management to have a material impact on the Company's present or future financial statements.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

**NOTE 3. RESTRUCTURING OF DEBT**

Effective May 22, 2013, the Company completed a restructuring of its unregistered debt and equity securities (the “Restructuring”) resulting in the issuance of shares of common stock in exchange for (i) the cancellation of the 12% Secured Promissory Notes, (ii) 7% Senior Secured Notes, (iii) September 2012 Secured Promissory Notes, (iv) 18% Notes and certain other indebtedness, (v) and the receipt of \$1.35 million from the sale of shares of common stock (the “Restructuring”). To effect the Restructuring, the Company entered into an exchange agreement (the “Exchange Agreement”) and a stock purchase agreement (the “Stock Purchase Agreement”). The Exchange Agreement, Stock Purchase Agreement and the transactions contemplated thereby are described in further detail below. The terms of the Restructuring were determined in negotiations between the Company and the creditors and investors party thereto, and were approved by the Board of Directors, including a majority of the disinterested directors. The securities issued pursuant the Restructuring are exempt from registration under Section 4(2) of the Securities Act of 1933 (the “Securities Act”) and Rule 506 of Regulation D because, among other reasons, all offerees are “accredited investors” under Section 2(15) of the Securities Act, all participants were existing security holders of the Company, and no general solicitation or public advertisement was conducted in connection with the Restructuring. The terms of the Restructuring are as follows:

**Exchange Agreement**

Before the Exchange Agreement was entered into on May 22, 2013, the Company had outstanding promissory notes payable, and accrued interest and penalties thereon, in the aggregate amount of \$9,267,641. These obligations arose as follows:

- From April to July 2012, we entered into Note and Common Stock Subscription Agreement (the “Subscription Agreement”) with accredited investors (collectively, the “Purchasers”) in connection with the subscription by the Purchasers for certain Secured Promissory Notes (the “2012 Secured Notes”) and shares of our common stock. The 2012 Secured Notes bore interest at 12% per annum and were originally due to mature on June 30, 2012. The note maturity date was amended several times but was in default as of December 31, 2012. As of December 31, 2012, and on May 22, 2013, the principal balance of these outstanding notes was \$1,231,250. In addition, approximately \$149,000 of interest and penalties was due as of May 22, 2013.
- On July 27, 2011 the Company completed an offering of \$5,000,000 of its senior secured convertible promissory notes (the “Senior Secured Notes”). The Senior Secured Notes bore an interest rate of 7% per annum, were originally scheduled to mature on November 30, 2011, and were convertible into shares of the Company’s common stock at a conversion price of \$125.00 per share, subject to adjustment. The terms and maturity date of the Senior Secured Notes had been amended several times, but were in default as of December 31, 2012. As of December 31, 2012, and on May 22, 2013, the principal balance of these outstanding notes was \$5,000,000. In addition, approximately \$2,282,000 of interest and penalties was due as of May 22, 2013.
- On September 12, 2012, the Company issued a promissory note amounting to \$250,000. As amended, the note was due on demand, bore interest at a rate of 12% per annum and was secured by the Company’s assets. As of December 31, 2012, and on May 22, 2013, the principal balance of this outstanding note was \$250,000. In addition, approximately \$24,000 of interest and penalties was due as of May 22, 2013.
- In January and May, 2013, the Company issued four (4) eighteen (18%) percent convertible promissory notes in the aggregate amount of \$311,500 (each an “18% Note”) that were due on demand. As of May 22, 2013, the balance of these outstanding notes was \$311,500. In addition, approximately \$19,000 of interest and penalties was due as of May 22, 2013.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

Under the Exchange Agreement, these creditors of the Company converted all of the foregoing outstanding debt into 9,267,641 shares of Common Stock at a conversion price of \$1.00 per share.

This Exchange Agreement terminated all outstanding promissory notes and warrants originally issued with these notes, and any anti-dilution protection thereunder. In addition, all creditors and placement agents provided a release of all claims against the Company with respect to all rights and ownership of the Debt and warrants, in consideration of the shares issued pursuant to this Exchange Agreement.

Stock Purchase Agreement

In addition to the exchange agreement, certain creditors entered into a Stock Purchase Agreement that resulted in the sale of 1,100,000 shares of common stock at a price of \$1.00 per share. Furthermore, certain creditors purchased an additional of 250,000 shares of Common Stock at a purchase price of \$1.00 per share under the exchange agreement, resulting in aggregate subscription of 1,350,000 shares of common stock for proceeds to the Company of \$1,240,010, net of legal fees of \$109,990.

In addition, any investor participating in and purchasing a minimum amount of Common Stock in the financing received, for no further consideration, the number of shares of Common Stock that such Investor would have received in debt or equity transactions if the price per share of Common Stock in prior transactions where they purchased stock or convertible notes would have been \$1.00 per share (the "Repricing Issuance"). As such, the Company issued 2,173,134 shares of common stock to these investors, and reflected the fair value of such shares of \$2,173,134 (based on a value of a \$1.00 per share) as cost to induce the exchange.

In addition, certain creditors and certain placement agents associated with the Debt, together holding warrants to purchase 40,800 shares of capital stock of the Company, exchanged such warrants and received one share of Common Stock in exchange for each share of capital stock of the Company underlying the warrants. All Investors and other parties holding warrants to purchase 81,934 shares of capital stock of the Company exchanged such warrants and received one share of Common Stock in exchange for each share of capital stock of the Company underlying the warrants. In the aggregate, warrants to acquire 122,734 shares of common stock were cancelled and exchanged for 122,734 shares of common stock, which were valued at \$122,734 and reflected as a financing cost in the accompanying statement of operations.

In the aggregate, the Stock Purchase Agreement resulted in the issuance of 3,645,868 shares of common stock.

**NOTE 4. EQUITY RESTRUCTURING**

Pursuant to the Restructuring discussed in Note 4, the Company underwent a significant change in ownership of its shares. Under the Restructuring, certain creditors, Investors, placement agents and consultants were issued approximately 94% of the Company's outstanding voting equity interests, with Ayer Capital Partners Master Fund, L.P. together with certain of its affiliates (the "Ayer Funds") and Bristol Investment Fund, Ltd., together with certain of its affiliates ("Bristol"), who owned approximately 41% and 29% respectively of the Company's outstanding voting securities immediately after the Restructuring. Prior to the Restructuring, control of the Company was widely disseminated among various stockholders, including the Investors. No single shareholder currently holds more than 25.4% of the voting shares after the Restructuring.

On May 20, 2013, Martin Schroeder resigned from the Board of Directors. In connection with the Restructuring, on May 22, 2013, Anthony Cataldo, Michael Handelman and William Andrews resigned from our Board of Directors. Finally, on May 24, 2013, our stockholders removed Dr. L. Stephen Coles from the Board and elected Paul Kessler to serve as an additional director on the Board. Mr. Kessler is a director of Bristol Investment Fund, Ltd. and a manager of Bristol Capital, LLC who, collectively, hold approximately 27.5% of our currently outstanding shares of common stock. Under the Restructuring, Bristol converted approximately \$2.92 million in Debt (including accrued interest and penalties) into shares of Common Stock, invested \$341,111 in the Financing, received a Repricing Issuance, and exchanged 45,325 warrants for shares of capital stock of the Company into shares of Common Stock, collectively resulting in the issuance of approximately 3,910,000 shares of Common Stock to Bristol.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

Agreement with Lion Biotechnologies, Inc. (Related Party)

On July 24, 2013, we entered into an Agreement and Plan of Merger (the “Lion Agreement”) with Lion Biotechnologies, Inc. (“Lion”), a privately owned Delaware corporation, and Genesis Biopharma Sub, Inc., our newly formed Delaware subsidiary. Lion was a non-operating entity with no assets and liabilities, and their only account balances were the shares held by its two (2) owners.

In the Lion Agreement, Lion’s stockholders received, in exchange for all of their issued and outstanding shares of common stock, an aggregate of 1,340,000 shares of our Common Stock with a fair value of \$6,700,000. The acquisition was done to acquire access to technical and managerial resources to build our current and future products, which we believed would enhance or future operations and enable us to obtain additional funding. The technical resources that we acquired included access to next generation T-cell technologies (including term sheets for such technologies), access to cancer vaccine technologies that Lion was evaluating at Harvard University, NIH, Baylor University and other institutions, and other proprietary technologies and ideas on novel T-cell manufacturing technologies that Lion was designing. The value of these shares of \$6,700,000 was recognized and recorded as an expense during the year ended December 31, 2013.

In addition, the Lion stockholders had the ability to receive an additional 1,350,000 shares of Common Stock upon the achievement of two milestones related to the Company’s financial performance and position. In November and December 2013 both of the milestones were met and, accordingly, the Company was required to issue the remaining 1,350,000 shares of Common Stock to the Lion Biotechnologies’ former stockholders. These additional shares were issued in the fourth quarter of 2013, and the Company determined their fair value on the dates of issuance to be \$9,956,250 in the aggregate, based on the trading prices of the Company’s stock at the date of achievement of the two milestones. The aggregate fair value of all shares issued under the Lion transaction of \$16,656,250 was recognized and recorded as Cost of Lion transaction on the Company’s accompanying statement of operations for the year ended December 31, 2013.

As part of the Lion transaction, Dr. Manish Singh entered into an employment agreement with us whereby we appointed him as our Chief Executive Officer and Chairman of the Board of the Company. We also agreed to reconstitute our Board of Directors, which changes became effective on September 3, 2013. In connection with his appointment as Chief Executive Officer and Chairman of the Board, we entered into an employment agreement with Dr. Singh pursuant to which we were required to pay Dr. Singh an annual base salary of \$34,000 until this Company raised at least \$1,000,000 in additional financing. Effective November 6, 2013, upon the closing of a Private Placement with proceeds of \$23.3 million to the Company (see Note 5), Dr. Singh’s annual salary increased to \$350,000. In addition to his base salary, Dr. Singh will be eligible to participate in the Company’s annual incentive compensation program, with a target potential bonus of 30% of Dr. Singh’s salary, conditioned upon the satisfaction of individual and company objectives. Since July 24, 2013, Dr. Singh is also entitled to health and other benefits programs and is eligible to receive stock option grants under the Company’s stock option plan.

On February 5, 2014, the Compensation Committee awarded Dr. Manish Singh, the Company’s Chief Executive Officer, a cash bonus of \$100,000 under his Employment Agreement for his services rendered in 2013, which was included in accrued expenses in the accompanying balance sheet as of the year ended December 31, 2013.

Amended and Restated Articles

Effective September 26, 2013, the Company amended and restated its articles of incorporation. The Amended and Restated Articles of Incorporation effected the following:

(1) a 1-for-100 reverse stock split (pro-rata reduction of outstanding shares) of Common Stock (the “Reverse Stock Split”). All share and per share amounts included in these financial statements have been retroactively restated to reflect the reverse stock split as if it had occurred at the beginning of the earliest period presented.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

(2) to fix the number of authorized shares of Common Stock after the Reverse Stock Split at one hundred and fifty million (150,000,000) shares of Common Stock, which change resulted in an increase in the authorized number of shares of Common Stock.

(3) to authorize the issuance of fifty million (50,000,000) shares of “blank check” preferred stock, \$0.001 par value per share, to be issued in series, and all properties of such preferred stock to be determined by the Company’s Board.

(4) to change the name of the Company to “Lion Biotechnologies, Inc.”

(5) to add indemnification and limit the personal liability of officers and members of the Company’s Board of Directors.

Amendment to 2011 Plan

The Company’s Board of Directors and the holders of a majority of the issued and outstanding shares of common stock approved an amendment to the Company’s 2011 Equity Incentive Plan (the “2011 Plan”) (a) to increase the number of shares of common stock authorized for issuance under the 2011 Plan from 180,000 shares of common stock to 1,700,000 shares of common stock, (b) increasing the maximum number of shares eligible for issuance under the 2011 Plan in any twelve-month period from 50,000 shares of common stock to 300,000 shares of common stock.

Director Stock Awards

On July 24, 2013, the Company entered into a Director Stock Award Agreement (the “Award Agreement”) with each of General Merrill McPeak, Matrix Group International, Inc. (on behalf of David Voyticky) (“*Matrix*”) and Bristol Capital, LLC (on behalf of Paul Kessler) (“*Bristol*”) whereby General McPeak, Matrix and Bristol each received 133,532 shares of Common Stock or an aggregate of 400,596 shares with a fair value of \$2,002,982 for consideration of services rendered as directors. The terms of the Award Agreement were approved by a majority of the Company’s stockholders, including a majority of the disinterested stockholders. The securities issued pursuant the Award Agreement are exempt from registration under Section 4(2) of the Securities Act of 1933 (the “Securities Act”) because, among other reasons, all offerees are “accredited investors” under Section 2(15) of the Securities Act and no general solicitation or public advertisement was conducted in connection with the issuance.

**NOTE 5. DERIVATIVE LIABILITIES**

In June 2008, the FASB issued authoritative guidance on determining whether an instrument (or embedded feature) is indexed to an entity’s own stock. Under the authoritative guidance, effective January 1, 2009, instruments which did not have fixed settlement provisions were deemed to be derivative instruments. The convertible notes and warrants issued related prior to 2012 did not have fixed settlement provisions because their conversion and exercise prices may be lowered if the Company issues securities at lower prices in the future. The conversion feature and warrants have been characterized as derivative liabilities to be re-measured at the end of every reporting period with the change in value reported in the statement of operations. The value of these derivatives was determined to be \$7,737,793 as of December 31, 2011. During the period through September 30, 2012, the Company issued additional convertible notes and warrants that did not have fixed settlement provisions for which the Company determined the value of the derivative liabilities increased by \$897,354 to \$8,635,147. The Company used a probability weighted average Black-Scholes-Merton model to value these derivative instruments.

The Company used the assistance of a valuation specialist to determine the fair value of its derivative liability at December 31, 2012. As a result of the Company’s inability to pay its debt obligations, the default status of its convertible promissory notes and lack of available working capital at December 31, 2012, for valuation purposes, the Company, with the assistance of the independent valuation expert, determined that the effect of the default and insolvent financial condition, as such, was that the outstanding conversion features and warrants accounted for as derivative upon their issuance had no more value at December 31, 2012. For the year ended December 31, 2012, the Company recorded a gain due to the decrease in fair value of the derivative liabilities of \$8,635,147.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

On May 22, 2013, upon the completed restructuring of the Company's debt and equity securities ("financial instruments") (see Note 3), all financial instruments held at that time that were subjected to derivative accounting were converted into shares of the Company's common stock, thereby eliminating all applicable derivative liabilities.

**NOTE 6. PRIVATE PLACEMENT**

On October 30, 2013, the Company, entered into a Securities Purchase Agreement (the "Securities Purchase Agreement") with the institutional and other accredited investors identified therein (each, an "Investor" and collectively, the "Investors"), relating to a private placement (the "Private Placement") through the sale of the Company's Common stock, Series A Convertible Preferred Stock ("Preferred stock"), and Warrants to Purchase Common Stock ("Warrants") for an aggregate gross proceeds of \$23,290,600. Under the Securities Purchase Agreement, the Investors agreed to purchase units consisting of either (i) 3,145,300 shares of Common Stock, and Warrants to purchase an aggregate of 3,145,300 shares of Common stock at a purchase price of \$2.00 per unit resulting in gross proceeds of \$6,290,600; or (ii) 17,000 shares of Series A Convertible Preferred Stock, and Warrants to purchase 8,500,000 shares of Common Stock at a purchase price of \$1,000 per unit, resulting in gross proceeds to the Company of \$17,000,000.

In connection with the Placement, the Company incurred \$1,495,037 of direct offering costs, resulting in net proceeds to the Company of 21,795,563. In addition, the Company granted warrants to purchase an aggregate of 726,856 shares of the Company's common stock to the placement agents.

The Warrants are exercisable in whole or in part, at an initial exercise price per share of \$2.50, and may be exercised in a cashless exercise if, after six months, there is no effective Registration Statement registering, or no current prospectus available for, the resale of the Warrant shares. The exercise price and number of shares of Common Stock issuable under the Warrants are subject to adjustments for stock dividends, splits, combinations and similar events. The Warrants may be exercised at any time upon the election of the holder, beginning on the date of issuance and ending on the fifth anniversary of the date of issuance.

*Series A Convertible Preferred Stock*

A total of 17,000 shares of Series A Convertible Preferred Stock (the "Series A Preferred Stock") have been authorized for issuance under the Certificate Of Designation Of Preferences And Rights Of Series A Convertible Preferred Stock (the "Certificate of Designation"). The shares of Series A Preferred Stock have a stated value of \$1,000 per share and are initially convertible into shares of Common Stock at a price of \$2.00 per share (subject to adjustment as described below). Under the Certificate of Designation, the holders of the Series A Preferred Stock have the following rights, preferences and privileges:

The Series A Preferred Stock may, at the option of the Investor, be converted at any time or from time to time into fully paid and non-assessable shares of Common Stock at the conversion price in effect at the time of conversion; provided, that a holder of Series A Preferred Stock may at any given time convert only up to that number of shares of Series A Preferred Stock so that, upon conversion, the aggregate beneficial ownership of the Company's Common Stock (calculated pursuant to Rule 13d-3 of the Securities Exchange Act of 1934, as amended) of such Investor and all persons affiliated with such Investor, is not more than 4.99% of the Company's Common Stock then outstanding (subject to adjustment up to 9.99% solely at the Investor's discretion upon 60 days' prior notice). The number of shares into which one share of Series A Preferred Stock shall be convertible is determined by dividing the stated value of \$1,000 per share by the initial Conversion Price. The "Conversion Price" per share for the Series A Preferred Stock is initially equal to \$2.00 (subject to appropriate adjustment for certain events, including stock splits, stock dividends, combinations, recapitalizations or other recapitalizations affecting the Series A Preferred Stock).

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

The Series A Preferred Stock will automatically be converted into Common Stock at the then applicable Conversion Price (i) upon the written consent of the Investors holding at least a majority of the outstanding shares of Series A Preferred Stock or (ii) if required by the Company for the Company to list its Common Stock on a national securities exchange; provided, any such conversions will continue to be limited by, and subject to the beneficial ownership conversion limitations set forth above.

Except as otherwise required by law, the holders of shares of Series A Preferred Stock shall not have the right to vote on matters that come before the stockholders; provided, that the Company will not, without the prior written consent of a majority of the outstanding Series A Preferred Stock: (i) amend, alter, or repeal any provision of the Articles of Incorporation (including the Certificate of Designation setting forth the rights of the Series A Preferred Stock) or Bylaws in a manner adverse to the Series A Preferred Stock; (ii) create or authorize the creation of or issue any other security convertible into or exercisable for any equity security, having rights, preferences or privileges senior to or on parity with the Series A Preferred Stock, or increase the authorized number of shares of Series A Preferred Stock; (iii) issue or sell any equity or debt securities for one year after the initial sale of the Series A Preferred Stock, subject to certain specified and other customary exceptions; or (iv) enter into any agreement with respect to any of the foregoing.

In the event of any dissolution or winding up of the Company, whether voluntary or involuntary, the proceeds shall be paid pari passu among the holders of the shares of Common Stock and Preferred Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted to Common Stock.

The Company may not declare, pay or set aside any dividends on shares of any class or series of capital stock of the Company (other than dividends on shares of Common Stock payable in shares of Common Stock) unless the holders of the Series A Preferred Stock shall first receive, or simultaneously receive, an equal dividend on each outstanding share of Series A Preferred Stock.

The Company analyzed the conversion feature associated with the Series A Preferred for derivative accounting under ASC 815-20 and ASC 815-15, and determined that the conversion feature met the criteria for classification in equity and did not require derivative treatment under ASC 815-20 and ASC 815-15.

In accordance with ASC 470-20, the Company determined that the common stock into which the Series A Preferred on the date of issuance of the Series A Preferred was convertible at less than the fair value of the common shares using the relative fair method, resulting in a beneficial conversion feature that the Company recognized as an increase to additional paid-in capital and a deemed dividend to the Series A Preferred stockholders of \$8,461,627.

*Registration Rights Agreement.*

The Company also entered into a Registration Rights Agreement (the "Registration Rights Agreement") with the Investors, which sets forth the rights of the Investors to have their shares of Common Stock purchased in the Private Placement and the shares of Common Stock issuable upon (i) the conversion of the Series A Preferred Stock and (ii) the exercise of the Warrants, registered with the Securities and Exchange Commission (the "SEC") for public resale under the Securities Act. The Company will also be required to maintain the effectiveness of the Registration Statement until the earlier to occur of (i) the date on which all of the registrable securities covered by the Registration Rights Agreement have been sold; or (ii) transferred in a manner that they may be resold without subsequent registration under the Securities Act. The registration agreement was filed in December 2013 and was declared effective by the Securities and Exchange Commission on January 30, 2014.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

**NOTE 7. STOCKHOLDERS EQUITY (DEFICIENCY)**

Year ended December 31, 2013

On October 31, 2013, the Company granted 50,000 shares of common stock for consulting services. These shares were valued at \$274,000 based on the trading price of the Company's common stock at the date of the agreement.

On November 18, 2013, the Company granted 75,000 shares of restricted stock to a new employee and 25,000 shares to a second new employee. The foregoing 100,000 shares of restricted stock vest over three years. Any unvested shares are forfeited and returned to the Company if the employees cease to be employed before the shares are fully vested. As no shares vested during the year ended December 31, 2013, no compensation expense was recognized on these 100,000 shares of restricted stock granted during the year then ended.

On November 14, 2013, the Company also issued 5,747 shares of common stock to a creditor as payment for outstanding obligations. The fair value of the 5,747 shares issued was \$25,000 based on the trading price of the Company's common stock at the date of settlement of the obligation, which was reduced by the total fair value of the shares issued of \$25,000.

Year ended December 31, 2012

***Issuance of common stock and warrants for cash***

In February 2012, the Company sold 2,500 shares of its common stock and a five-year warrant to purchase 2,500 shares for \$250,000. The warrant agreement included an anti-dilution provision that allowed for the automatic reset of the number of warrants issued and exercise price of the warrants upon any future sale of common stock or warrants at or below the current exercise price. As a result, the Company determined that these warrants are not considered indexed to the Company's own stock and characterized the fair value of these warrants as an offering cost and derivative liabilities upon issuance. The aggregate value of these warrants issued was \$182,081 using the probability weighted average Black-Scholes-Merton option valuation model.

***Issuance of common stock for services***

In January 2012, the Company issued 15,495 shares of common stock with a fair value of \$800,000 for services. The shares of common stock issued were valued at the market price on the date of issuance.

In July 2012, Company issued 15,000 shares of common stock with a fair value of \$750,000 to the principal of a firm engaged to seek financing and other strategic relationships for the Company. The shares of common stock issued were valued at the market price on the date of issuance.

***Issuance of common stock with Promissory Notes***

From April to July 2012, the Company agreed to issue 6,156 shares of its common stock with a fair value of \$497,888 to the Purchasers of its promissory notes. Subsequently, a total of 3,125 shares of common stock were issued during the year ended December 31, 2012 and 3,031 shares of common stock valued at \$245,133 remains to be issued as of December 31, 2013. The shares of common stock issued were valued at the market price on the date of grant and recorded as a debt discount that was amortized to interest expense.

In September 2012, the Company issued an aggregate of 17,750 shares of common stock with a fair value of \$875,000 to a holder of the Company's promissory note. The shares of common stock issued were valued at the market price on the date of issuance and recorded as a financing cost.



**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

**NOTE 8. STOCK OPTIONS AND WARRANTS**

***Stock Options***

As of October 14, 2011, the Company's Board of Directors, based upon the approval and recommendation of the Compensation Committee, approved by unanimous written consent the Company's 2011 Equity Incentive Plan (the "2011 Plan") and form of option agreements for grants under the 2011 Plan. Employees, directors, consultants and advisors of the Company are eligible to participate in the 2011 Plan. The 2011 Plan will be administered by the Board of Directors or the Company's Compensation Committee and has 1,700,000 shares of common stock reserved for issuance in the form of incentive stock options (available for issuance to employees, and only upon shareholder approval of the 2011 Plan); non-qualified options; common stock; and grant appreciation rights. No person eligible to participate in the 2011 Plan shall be granted options or other awards during a twelve month period that exceeds 300,000 shares. No options or stock appreciation rights may be granted after ten years of the adoption of the 2011 Plan by the Board of Directors, nor may any option have a term of more than ten years from the date of grant. The exercise price of non qualified options and the base value of a stock appreciation right shall not be less than the fair market value of the common stock on the date of grant. The exercise price of an incentive stock option shall not be less than the fair market value of the stock covered by the option at the time of grant and in instances where a grantee possesses more than 10% percent of the combined voting power of all classes of stock of the Company, the exercise price shall not be less than 110% percent of the fair market value of the common stock at the time of grant. The Company's stockholders did not approve the 2011 Plan within the required one-year period. Accordingly, the Company cannot grant incentive stock options under the 2011 Plan.

A summary of the status of stock options at December 31, 2013 and 2012 is presented in the following table:

	<b>Shares Under Option</b>	<b>Weighted Average Exercise Price</b>	<b>Weighted Average Remaining Contractual Life</b>	<b>Aggregate Intrinsic Value</b>
Outstanding at December 31, 2011	92,750	\$ 109.0	8.5 years	\$ 1,114,063
Granted	3,000	104.0		
Exercised				
Expired/Forfeited	(2,000)	92.0		
Outstanding at December 31, 2012	93,750	107.0	7.7 years	\$ 217,063
Granted	225,000	5.65		
Exercised				
Expired/Forfeited	(40,000)	125.0		
Outstanding at December 31, 2013	278,750	\$ 23.1	9.1 years	\$ 1,176,063
Exercisable at December 31, 2013	81,687	\$ 45.1	7.8 years	\$ 344,642

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

On August 31, 2013, 25,000 options to purchase common stock granted to Mr. Cataldo with unamortized compensation cost of \$1,611,698 were forfeited as a result of his resignation as our chief executive officer effective June 1, 2013. See Note 10.

On March 1, 2011, the Company entered into an employment agreement that provided for the grant of options to purchase 25,000 shares of its common stock at an exercise price of \$125.00. The options were to vest as follows: a) 5,000 shares vested immediately and b) 20,000 shares vest in equal monthly installments over the two-year term of the agreement. Neither the Board of Directors nor the Compensation Committee approved the grant of the foregoing options. Accordingly, the Company may be obligated to grant these options, but has not done so yet. Therefore, as the grant of these options has not been approved, they are not included in compensation expense or in number of granted options listed as of and for the years ended December 31, 2013 and 2012.

On November 18, 2013, each non-executive director of the Company was granted an option to purchase up to 40,000 shares at an exercise price of \$5.65 per share (the closing price of our common stock on the date of grant). Options for 10,000 of these shares vested upon grant, with the remaining options vesting over the next three quarterly periods. These options have a ten-year term and will be exercisable for two years following termination of service as a member of our Board of Directors, unless the Director is terminated for cause, in which case the options will be terminated. The aggregate fair value of these options at the date of grant was determined to be \$674,071 based on the Black-Scholes-Merton option pricing model.

During 2013, the Company granted to employees options to purchase 100,000 shares of its common stock at an exercise price of \$5.65. None of these options vested immediately, and the remaining 100,000 options begin vesting on the one year anniversary in equal monthly installments quarterly over the remaining terms of the agreements. During 2013, the Company also granted to a consultant options to purchase 5,000 shares of its common stock at an exercise price of \$5.65, and which vested immediately.

The aggregate fair values of the options granted in 2013 and 2012 were \$1,265,094 and \$146,443, respectively. The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model that uses the assumptions noted in the following table. For purposes of determining the expected life of the option, an average of the estimated holding period is used. The risk-free rate for periods within the contractual life of the options is based on the U. S. Treasury yield in effect at the time of the grant.

	Year ended December 31,	
	2013	2012
Expected volatility	236%	208%
Expected dividends	0	0
Expected average term (in years)	5.38	4.25
Risk free rate - average	2.67%	1.78%
Forfeiture rate	0	0

During the years ended December 31, 2013 and 2012, the Company recorded compensation costs of \$747,241 and \$2,528,254, respectively, relating to the vesting of the stock options discussed above. As of December 31, 2013, the aggregate value of unvested options was \$1,101,224, which will continue to be amortized as compensation cost as the options vest over terms ranging from 9 months to 5 years, as applicable.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

**Warrants**

A summary of the status of stock warrants at December 31, 2013 and 2012 is presented in the following table:

	<u>Shares Under Warrants</u>	<u>Weighted Average Exercise Price</u>	<u>Weighted Average Remaining Contractual Life</u>	<u>Aggregate Intrinsic Value</u>
Outstanding at December 31, 2011	96,800	\$ 122.0	4.5 years	\$ -
Issued	11,934	125.0		
Exercised				
Expired	-			
Outstanding at December 31, 2012	108,734	\$ 123.0	3.5 years	\$ -
Issued	12,387,156	2.5		
Exercised	(122,734)			
Expired	-			
Outstanding and exercisable at December 31, 2013	<u>12,373,156</u>	\$ 2.51	4.11 years	\$ 31,056,390

The Company, in connection with the November 2013 offering, issued warrants to purchase an aggregate of 11,645,300 shares of its common stock to investors, and warrants to purchase an aggregate of 726,856 shares of its common stock to placement agents, in connection with the sale of its securities for cash under the Private Placement (see Note 6). All of these warrant grants have an exercise price per share of \$2.50, are fully vested, and will expire in 2018.

**NOTE 9. INCOME TAXES**

The Company has no tax provision for any period presented due to our history of operating losses. As of December 31, 2013, the Company had net operating loss carry forwards of approximately \$10,636,151 that may be available to reduce future years' taxable income through 2033. Future tax benefits which may arise as a result of these losses have not been recognized in these financial statements, as management has determined that their realization is not likely to occur and accordingly, the Company has recorded a valuation allowance for the deferred tax asset relating to these tax loss carry-forwards.

Significant components of the Company's deferred income tax assets are as follows as of:

	<u>December 31, 2013</u>	<u>December 31, 2012</u>
Deferred income tax asset:		
Net operating loss carry forward	3,679,022	6,957,129
Valuation allowance	(3,679,022)	(6,957,129)
Net deferred income tax asset	<u>\$ —</u>	<u>\$ —</u>

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

Reconciliation of the effective income tax rate to the U.S. statutory rate is as follows:

	Year Ended December 31,	
	2013	2012
Federal Statutory tax rate	(34) %	(34) %
State tax, net of federal benefit	(5) %	(5) %
	(39) %	(39) %
Valuation allowance	39%	39%
Effective tax rate	-%	-%

The Company adopted accounting rules which address the determination of whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under these rules, the Company may recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. These accounting rules also provide guidance on de-recognition, classification, interest and penalties on income taxes, accounting in interim periods and requires increased disclosures. As of December 31, 2013, no liability for unrecognized tax benefits was required to be recorded.

**NOTE 10. LICENSE AND COMMITMENTS**

***National Institutes of Health and the National Cancer Institute***

Effective August 5, 2011, the Company signed a Cooperative Research and Development Agreement (CRADA) with the National Institutes of Health and the National Cancer Institute (NCI). Under the terms of the five-year cooperative research and development agreement, the Company will work with Steven A. Rosenberg, M.D., Ph.D., chief of NCI's Surgery Branch, to develop adoptive cell immunotherapies that are designed to destroy metastatic melanoma cells using a patient's tumor infiltrating lymphocytes.

The Company will provide funds in the amount of \$1,000,000 per year of the CRADA for Dr. Rosenberg to use to acquire technical, statistical, and administrative support for the research activities, as well as to pay for supplies and travel expenses. The Company will provide funds in the amount of \$250,000 on a quarterly basis. The first quarterly installment of \$250,000 was due within thirty (30) days of the Effective Date of the CRADA and each subsequent installment will be due within thirty (30) days of each quarterly anniversary of the December 5, 2011 Effective Date. In addition, although the CRADA has a five year term, either party to the CRADA has the right to terminate the CRADA upon 60 days' notice to the other party.

For each of the years ended December 31, 2013 and 2012, the Company recognized \$1,000,000 of CRADA expenses, which were recorded as part of research and development expenses in the statement of operations during the years then ended. As of December 31, 2013 and 2012, \$250,000 and \$500,000, respectively, was due under these agreements.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

***National Institutes of Health***

Effective October 5, 2011, the Company entered into a Patent License Agreement (the "License Agreement") with the National Institutes of Health, an agency of the United States Public Health Service within the Department of Health and Human Services ("NIH"). Pursuant to the License Agreement, NIH granted to the Company a non-exclusive worldwide right and license to develop and manufacture certain proprietary autologous tumor infiltrating lymphocyte adoptive cell therapy products for the treatment of metastatic melanoma, ovarian cancer, breast cancer, and colorectal cancer. The license agreement required us to pay the NIH approximately \$723,000 of upfront licensing fees and expense reimbursements in 2011, which amounts were included in Research and Development expenses in fiscal 2011. In addition, the Company will have to pay royalties of six percent (6%) of net sales (subject to certain annual minimum royalty payments), a percentage of revenues from sublicensing arrangements, and lump sum benchmark royalty payments on the achievement of certain clinical and regulatory milestones for each of the various indications and other direct cost incurred by NIH pursuant to the agreement. The Company initially intends to focus on the development of licensed products in the metastatic melanoma field of use. If the Company achieves all benchmarks for metastatic melanoma, up to and including the product's first commercial sale in the United States, the total amount of such benchmark payments will be \$6,050,000. The benchmark payments for the other three indications, if all benchmarks are achieved, will be \$6,050,000 for ovarian cancer, \$12,100,000 for breast cancer, and \$12,100,000 for colorectal cancer. Accordingly, if the Company achieves all benchmarks for all four licensed indications, the aggregate amount of benchmark royalty payments that the Company will have to make to NIH will be \$36,300,000.

During the years ended December 31, 2013 and 2012, there were no net sales subject to certain annual minimum royalty payments, a percentage of revenues from sublicensing arrangements. In addition there were no benchmarks or milestones achieved that would require payment under the lump sum benchmark royalty payments on the achievement of certain clinical and regulatory milestones for each of the various indications.

During the years ended December 31, 2013 and 2012, the Company recognized \$329,367 and \$636,000, respectively, of NIH expenses, which were recorded as part of research and development expenses in the accompanying statements of operations during the years then ended. As of December 31, 2013 and 2012, \$941,659 and \$682,292, respectively were due under the License Agreement with NIH. On January 17, 2014, the Company paid the NIH the entire past due amount of \$941,659 payable to the NIH under the License Agreement, and the Company is now current with all of its payment obligations under the License Agreement.

**NOTE 11. RELATED PARTY TRANSACTIONS**

***Accrued Payroll and Fees***

As of December 31, 2013 and 2012, the Company accrued the unpaid salaries of its officers and fees due to members of the Company's board of directors in the amount of \$338,731 and \$395,081 respectively, which is included in accrued expenses in the accompanying balance sheet.

***Settlement with Mr. Cataldo***

On June 19, 2013, the Company entered into a Settlement Agreement and General Release of All Claims (the "Settlement Agreement") with Anthony Cataldo, this Company's former Chief Executive Officer. Under the Settlement Agreement, the Company agreed to pay Mr. Cataldo a cash payment of \$370,000 when the Company obtains financing of more than \$5,000,000. The \$370,000 was to be paid as follows: (a) a payment of \$120,000, less all appropriate federal and state income and employment taxes, would be paid in cash, and (b) and another payment of \$250,000, less all appropriate federal and state income and employment taxes, would be paid in the same securities as sold in the next financing. On November 5, 2013, the Company completed a financing of more than \$5,000,000 and, as a result, the foregoing \$370,000 payment became due and payable. On November 18, 2013, the Company and Mr. Cataldo agreed to revise the terms of the Settlement Agreement and to reduce the foregoing \$370,000 payment to \$250,000, payable in cash as payment in full for all amounts owed to him under the Settlement Agreement. The \$250,000 payment has been made as of the year ended December 31, 2013.

**LION BIOTECHNOLOGIES, INC.**  
**(A Development Stage Company)**  
**NOTES TO FINANCIAL STATEMENTS**  
**For the Years Ended December 31, 2013 and 2012**  
**and for the Period September 17, 2007 (Inception) to December 31, 2013**

***Emmes Group Consulting LLC***

Effective as of February 15, 2011, the Company entered into a consulting agreement with Emmes Group Consulting LLC, a strategic business consulting firm (“Emmes”). Mr. Schroeder, a former director of the Company, is an Executive Vice President and Managing Director of Emmes and the Emmes Group, Inc. Under the consulting agreement, Emmes agreed to assist and advise us with respect to the development of an overall strategic business plan, the identification of in-licensing therapeutic opportunities, and raising debt and equity capital. In consideration for the foregoing consulting services, we issued to Emmes a ten-year warrant to purchase up to 1,000 shares of our common stock at an exercise price of \$126.00 per share. In addition, we agreed to pay Emmes \$10,000 per month. The initial term of the consulting agreement expired on May 15, 2011, but continued in accordance with the terms of the consulting agreement for an unspecified term until terminated at any time by either party with or without cause. Effective August 1, 2011, the Company amended the consulting agreement to increase the monthly consulting fee to \$20,000, commencing as of July 11, 2011. The amendment also extended the term of the consulting agreement to December 31, 2011.

On February 12, 2012, the Company entered into a Second Amendment to the Consulting Agreement, engaging the Emmes Group as its senior contractor and project manager responsible for the overall management of the design, development, implementation, and installation of our corporate and regulatory compliant information technology infrastructure and systems. The consulting agreement with Emmes Group was terminated in January 2013.

During the year ended December 31, 2013, the Company recognized a total of \$22,412 of consulting expenses from Emmes, which was recorded as part of operating expenses in the statement of operations.

LION BIOTECHNOLOGIES, INC.  
Condensed Balance Sheets

	June 30, 2014 <u>(unaudited)</u>	December 31, 2013 <u></u>
<b>ASSETS</b>		
<b>Current Assets</b>		
Cash and cash equivalents	\$ 18,440,361	\$ 19,672,177
Deposits	9,744	15,000
Prepaid expenses	69,466	158,716
<b>Total Current Assets</b>	<u>18,519,571</u>	<u>19,845,893</u>
<b>Property and equipment</b> , net of accumulated depreciation of \$33,730 and \$16,002	15,771	27,756
<b>Total Assets</b>	<u>\$ 18,535,342</u>	<u>\$ 19,873,649</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>Current Liabilities</b>		
Accounts payable	\$ 440,550	\$ 412,976
Accrued expenses	715,922	1,856,956
<b>Total Current Liabilities</b>	<u>1,156,472</u>	<u>2,269,932</u>
<b>Commitments and contingencies</b>		
<b>Stockholders' Equity</b>		
Preferred stock, \$0.001 par value; 50,000,000 shares authorized, 5,800 shares and 17,000 shares issued and outstanding, respectively	6	17
Common stock, \$0.000041666 par value; 150,000,000 shares authorized, 27,226,350 and 20,023,958 shares issued and outstanding, respectively	1,135	835
Common stock to be issued, 303,125 shares	245,153	245,153
Additional paid-in capital	86,029,444	81,884,897
Accumulated deficit	(68,896,868)	(64,527,185)
<b>Total Stockholders' Equity</b>	<u>17,378,870</u>	<u>17,603,717</u>
<b>Total Liabilities and Stockholders' Equity</b>	<u>\$ 18,535,342</u>	<u>\$ 19,873,649</u>

The accompanying notes are an integral part of these financial statements.

**LION BIOTECHNOLOGIES, INC.**  
**Condensed Statements of Operations**  
**(Unaudited)**

	<b>For the Three Months Ended</b>		<b>For the Six Months Ended</b>	
	<b>June 30,</b>		<b>June 30,</b>	
	<b>2014</b>	<b>2013</b>	<b>2014</b>	<b>2013</b>
<b>Revenues</b>	\$ -	\$ -	\$ -	\$ -
<b>Costs and expenses</b>				
Operating expenses (including \$919,350, \$87,386, \$1,781,355 and \$133,032 in share based compensation costs)	1,748,942	779,260	3,705,794	1,214,173
Research and development	361,227	250,000	663,889	520,000
Total costs and expenses	2,110,169	1,029,260	4,369,683	1,734,173
<b>Loss from operations</b>	<b>(2,110,169)</b>	<b>(1,029,260)</b>	<b>(4,369,683)</b>	<b>(1,734,173)</b>
<b>Other income</b>				
Interest expense	-	(104,127)	-	(445,743)
Cost to induce exchange transaction	-	(2,295,868)	-	(2,295,868)
Total other expense	-	(2,399,995)	-	(2,741,611)
<b>Net Loss</b>	<b>\$ (2,110,169)</b>	<b>\$ (3,429,255)</b>	<b>\$ (4,369,683)</b>	<b>\$ (4,475,784)</b>
<b>Net Loss Per Share, Basic and Diluted</b>	<b>\$ (0.09)</b>	<b>\$ (4.19)</b>	<b>\$ (0.19)</b>	<b>\$ (1.54)</b>
<b>Weighted-Average Common Shares</b>				
<b>Outstanding, Basic and Diluted</b>	<b>24,137,782</b>	<b>818,806</b>	<b>22,502,761</b>	<b>2,904,391</b>

The accompanying notes are an integral part of these financial statements.



**LION BIOTECHNOLOGIES, INC.**  
**Condensed Statements of Stockholders' Equity**  
**For the Six Months Ended June 30, 2014**  
**(Unaudited)**

	<u>Preferred Stock</u>		<u>Common Stock</u>		<u>Common Stock to Be Issued</u>	<u>Additional Paid-In Capital</u>	<u>Accumulated Deficit</u>	<u>Total Stockholders' Equity</u>
	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>				
<b>Balance - December 31, 2013</b>	17,000	\$ 17	20,023,958	\$ 835	\$ 245,153	\$ 81,884,897	\$ (64,527,185)	\$ 17,603,717
Fair value of stock options						1,340,601		1,340,601
Common stock issued upon exercise of warrants			945,392	40		2,363,441		2,363,481
Common stock issued upon conversion of preferred shares	(11,200)	(11)	5,600,000	233		(222)		-
Common stock issued for services			657,000	27		440,727		440,754
Net loss							(4,369,683)	(4,369,683)
<b>Balance - June 30, 2014</b>	<u>5,800</u>	<u>\$ 6</u>	<u>27,226,350</u>	<u>\$ 1,135</u>	<u>\$ 245,153</u>	<u>\$ 86,029,444</u>	<u>\$ (68,896,868)</u>	<u>\$ 17,378,870</u>

The accompanying notes are an integral part of these financial statements.

**LION BIOTECHNOLOGIES, INC.**  
**Condensed Statements of Cash Flows**  
(Unaudited)

**For the Six Months Ended  
June 30,**

	<b>2014</b>	<b>2013</b>
<b>Cash Flows From Operating Activities</b>		
Net loss	\$ (4,369,683)	\$ (4,475,784)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	17,728	3,106
Fair value of vested stock options and warrants	1,340,601	220,418
Common stock issued for services	440,754	-
Common stock issued to induce conversion of warrants	-	122,734
Common stock issued to induce exchange transaction	-	2,173,134
Changes in assets and liabilities:		
Deposits, prepaid expenses and other assets	94,506	(1,860)
Accounts payable, accrued expenses and other current liabilities	(1,113,460)	976,323
<b>Net Cash Used In Operating Activities</b>	<b>(3,589,554)</b>	<b>(981,929)</b>
<b>Cash Flows From Investing Activities</b>		
Purchases of computer equipment and furniture	(5,742)	-
<b>Net Cash Used In Investing Activities</b>	<b>(5,742)</b>	<b>-</b>
<b>Cash Flows From Financing Activities</b>		
Proceeds from the issuance of convertible notes, net	-	311,500
Proceeds from the issuance of common stock upon exercise of warrants	2,363,480	-
Proceeds from the issuance of common stock, net	-	1,240,010
<b>Net Cash Provided By Financing Activities</b>	<b>2,363,480</b>	<b>1,551,510</b>
<b>Net Increase (Decrease) In Cash And Cash Equivalents</b>	<b>(1,231,816)</b>	<b>569,581</b>
<b>Cash and Cash Equivalents, Beginning of Period</b>	<b>19,672,177</b>	<b>-</b>
<b>Cash and Cash Equivalents, End of Period</b>	<b>\$ 18,440,361</b>	<b>\$ 569,581</b>
<b>Supplemental Disclosures of Cash Flow Information:</b>		
Common stock issued upon conversion of accrued interest and penalty	\$ -	\$ 9,267,641
Common stock issued upon conversion of preferred stock	\$ 233	\$ -

The accompanying notes are an integral part of these financial statements.

**LION BIOTECHNOLOGIES, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2014 and 2013**  
**(UNAUDITED)**

**NOTE 1. GENERAL ORGANIZATION AND BUSINESS**

Lion Biotechnologies, Inc. (the “Company,” “we,” “us” or “our”) was originally incorporated under the laws of the state of Nevada on September 17, 2007. Until March 2010, we were an inactive company known as Freight Management Corp. On March 15, 2010, we changed our name to Genesis Biopharma, Inc., and in 2011 we commenced our current business. On September 26, 2013, we amended and restated our Articles of Incorporation to, among other things, change our name to Lion Biotechnologies, Inc., effect a 1-for-100 reverse stock split (pro-rata reduction of outstanding shares) of our common stock, increase (after the reverse stock split) the number of our authorized number of shares of common stock to 150,000,000 shares, and authorize the issuance of 50,000,000 shares of “blank check” preferred stock, \$0.001 par value per share.

Common stock share and per share information contained in these financial statements has been adjusted to reflect the foregoing stock split as if it occurred at the earliest period presented.

***Basis of Presentation of Unaudited Condensed Financial Information***

The unaudited condensed financial statements of the Company for the three and six months ended June 30, 2014 and 2013 have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information and pursuant to the requirements for reporting on Form 10-Q and Regulation S-K. Accordingly, they do not include all the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements. However, such information reflects all adjustments (consisting solely of normal recurring adjustments), which are, in the opinion of management, necessary for the fair presentation of the financial position and the results of operations. Results shown for interim periods are not necessarily indicative of the results to be obtained for a full fiscal year. The balance sheet information as of December 31, 2013 was derived from the audited financial statements included in the Company's financial statements as of and for the year ended December 31, 2013 included in this prospectus. These financial statements should be read in conjunction with that report.

As the Company has not yet commenced any revenue-generating operations, does not have any cash flows from operations, and is dependent on debt and equity funding to finance its operations, the Company was considered a development stage company through March 31, 2014.

In June 2014, as discussed in Note, 2, the Financial Accounting Standards Board issued new guidance that removed all incremental financial reporting requirements from generally accepted accounting principles in the United States for development stage entities. The Company has adopted early this new guidance effective June 30, 2014, as a result of which all inception-to-date financial information and disclosures have been omitted from this report.

***Liquidity***

We are currently engaged in the development of therapeutics to fight cancer, we do not have any commercial products and have not yet generated any revenues from our biopharmaceutical business. We currently do not anticipate that we will generate any revenues during 2014 from the sale or licensing of any products. In addition, we have not generated any revenues from our prior business plans.

**LION BIOTECHNOLOGIES, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2014 and 2013**  
**(UNAUDITED)**

We have not had any revenues and are still in the development stage. As shown in the accompanying condensed financial statements, we have incurred a net loss of \$4,369,683 for the six months ended June 30, 2014 and used \$3,589,554 of cash in our operating activities during the six months ended June 30, 2014. As of June 30, 2014, we had \$18,440,361 of cash or cash equivalents on hand, stockholders' equity of \$17,378,870 and had working capital of \$17,363,099.

During 2014, we expect to further ramp up our operations, which will increase the amount of cash we will use in our operations. Our budget for 2014 includes increased spending on research and development activities, higher payroll expenses as we increase our professional staff, the costs associated with establishing our new Tampa, Florida, research facility, as well as ongoing payments under the Cooperative Research and Development Agreement (CRADA) we have entered into with the National Cancer Institute (NCI). Our budget anticipates that we will spend approximately \$8 million to \$10 million in 2014 on budgeted expenditures, although that amount may change materially. Based on the funds we had available on June 30, 2014, we believe that we have sufficient capital to fund our anticipated operating expenses for at least twelve months.

On November 5, 2013, we completed a \$23.3 million private placement of our securities to various institutional and individual accredited investors (the "Private Placement"). Despite the amount of funds that we raised in the Private Placement, the estimated cost of completing the development of our TIL-based therapy, and of obtaining all required regulatory approvals to market those product candidates, is substantially greater than the amount of funds we had available on June 30, 2014. Therefore, while we believe that our existing cash balances will be sufficient to fund our currently planned level of operations for at least twelve months, we will have to obtain additional funds in the future to complete our development plans. We intend to seek this additional funding through various financing sources, including possible sales of our securities, and in the longer term through strategic alliances with other pharmaceutical or biopharmaceutical companies.

**NOTE 2. SUMMARY OF SIGNIFICANT ACCOUNTING PRACTICES**

***Loss per Share***

Basic earnings (loss) per share is computed by dividing the net income (loss) applicable to common stockholders by the weighted average number of shares of common stock outstanding during the period. Diluted earnings (loss) per share is computed by dividing the net income (loss) applicable to common stockholders by the weighted average number of common shares outstanding plus the number of additional common shares that would have been outstanding if all dilutive potential common shares had been issued. For the three and six months ended June 30, 2014 and 2013, the calculations of basic and diluted loss per share are the same because inclusion of potential dilutive securities in the computation would have an anti-dilutive effect due to the net losses.

The potentially dilutive securities at June 30, 2014 consist of options to acquire 868,750 shares of the Company's common stock, warrants to acquire 11,427,764 shares of common stock, and preferred stock that can convert into 2,900,000 shares of common stock.

***Fair Value Measurements***

The Company uses various inputs in determining the fair value of certain assets and liabilities and measures these on a recurring basis. Financial assets and liabilities recorded at fair value in the balance sheets are categorized by the level of objectivity associated with the inputs used to measure their fair value. Authoritative guidance provided by the Financial Accounting Standards Board (the "FASB") defines the following levels directly related to the amount of subjectivity associated with the inputs to fair valuation of these financial assets and liabilities:

**LION BIOTECHNOLOGIES, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2014 and 2013**  
**(UNAUDITED)**

Level 1—Quoted prices in active markets for identical assets or liabilities.

Level 2—Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly.

Level 3—Unobservable inputs based on the Company's assumptions.

We are required to use observable market data if such data is available, without undue cost and effort. At June 30, 2014 and December 31, 2013, the fair value of cash and cash equivalents and accounts payable approximate their carrying values.

***Use of Estimates***

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

***Stock-Based Compensation***

The Company periodically grants stock options to employees and non-employees in non-capital raising transactions for as compensation for services rendered. The Company accounts for stock option grants to employees based on the authoritative guidance provided by the Financial Accounting Standards Board where the value of the award is measured on the date of grant and recognized over the vesting period. The Company accounts for stock option grants to non-employees in accordance with the authoritative guidance of the Financial Accounting Standards Board where the value of the stock compensation is determined based upon the measurement date as at either a) the date at which a performance commitment is reached, or b) at the date at which the necessary performance to earn the equity instruments is complete. Non-employee stock-based compensation charges generally are amortized over the vesting period on a straight-line basis. In certain circumstances where there are no future performance requirements by the non-employee, option grants are immediately vested and the total stock-based compensation charge is recorded in the period of the measurement date.

The fair value of the Company's common stock option grants are estimated using a Black-Scholes option pricing model, which uses certain assumptions related to risk-free interest rates, expected volatility, expected life of the common stock options, and future dividends. Compensation expense is recorded based upon the value derived from the Black-Scholes option pricing model, and based on actual experience. The assumptions used in the Black-Scholes option pricing model could materially affect compensation expense recorded in future periods.

***Recent Accounting Pronouncements***

On June 10, 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-10 (ASU 2014-10), Development Stage Entities (Topic 915): Elimination of Certain Financial Reporting Requirements, Including an Amendment to Variable Interest Entities Guidance in Topic 810, Consolidation. ASU 2014-10 eliminates the requirement to present inception-to-date information about income statement line items, cash flows, and equity transactions, and clarifies how entities should disclose the risks and uncertainties related to their activities. ASU 2014-10 also eliminates an exception provided to development stage entities in Consolidations (ASC Topic 810) for determining whether an entity is a variable interest entity on the basis of the amount of investment equity that is at risk. The presentation and disclosure requirements in Topic 915 are no longer required for interim and annual reporting periods beginning after December 15, 2014. The revised consolidation standards will take effect in annual periods beginning after December 15, 2015, however, early adoption is permitted. The Company adopted the provisions of ASU 2014-10 for this quarterly report on Form 10-Q for the six-months ended June 30, 2014.

**LION BIOTECHNOLOGIES, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2014 and 2013**  
**(UNAUDITED)**

On May 28, 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update No. 2014-09 (ASU 2014-09), Revenue from Contracts with Customers. ASU 2014-09 will eliminate transaction- and industry-specific revenue recognition guidance under current U.S. GAAP and replace it with a principle based approach for determining revenue recognition. ASU 2014-09 will require that companies recognize revenue based on the value of transferred goods or services as they occur in the contract. The ASU also will require additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for reporting periods beginning after December 15, 2016, and early adoption is not permitted. Entities can transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. Management has not determined the effect of adopting ASU 2014-09 on our ongoing financial reporting.

In April 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2014-08, "Presentation of Financial Statements (Topic 205) and Property, Plant and Equipment (Topic 360)." ASU 2014-08 amends the requirements for reporting discontinued operations and requires additional disclosures about discontinued operations. Under the new guidance, only disposals representing a strategic shift in operations or that have a major effect on the Company's operations and financial results should be presented as discontinued operations. This new accounting guidance is effective for annual periods beginning after December 15, 2014. The Company is currently evaluating the impact of adopting ASU 2014-08 on the Company's results of operations or financial condition.

Other recent accounting pronouncements issued by the FASB, including its Emerging Issues Task Force, the American Institute of Certified Public Accountants, and the Securities and Exchange Commission did not or are not believed by management to have a material impact on the Company's present or future financial statements.

**NOTE 3. STOCKHOLDERS' EQUITY**

***Issuance of common stock for services***

In January 2014, the Company issued 2,000 shares of common stock with a fair value of \$17,700 for services. The shares of common stock issued were valued at the market price on the date of issuance.

***Issuance of common stock for services with vesting terms***

During the six month period ended June 30, 2014, the Company granted 355,000 shares of its restricted common stock to three of its employees in accordance with the terms of their employment agreements. The 355,000 shares vest over a period of three years. As these shares were granted to employees, the Company calculated the aggregate fair value of these 355,000 shares based on the trading prices of the Company's stock at their grant dates and determined it to be approximately \$3,443,000. The allocable portion of the fair value of the stock that vested during the current period ended June 30, 2014 amounted to \$335,000 and was recognized as expense during the current period then ended.

During the six month period ended June 30, 2014, the Company also granted 200,000 shares of its restricted common stock to a consultant for services to be rendered pursuant to a consulting agreement. The 200,000 shares granted to the consultant will vest in three installments as follows: (i) 40,000 shares shall vest on September 30, 2014; (ii) 60,000 shares shall vest on September 30, 2015, and (iii) 100,000 shares shall vest on September 30, 2016. As these shares were granted to non-employees, the Company measures the fair value of common stock granted based on the trading price of the Company's stock at each financial reporting date. As the shares vest, they are revalued on each vesting date and an adjustment is recorded for the difference between the fair value already recorded and the current fair value on the date of vesting. The Company calculated the aggregate fair value of the 40,000 shares that will vest on September 30, 2014 based on the trading price of the Company's stock at current reporting date at June 30, 2014 and determined it to be approximately \$256,000. The allocable portion of the fair value of the stock that vested during the current period ended June 30, 2014 amounted to \$88,155 and was recognized as consulting expense during the current period then ended.

**LION BIOTECHNOLOGIES, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2014 and 2013**  
**(UNAUDITED)**

Shares of restricted stock granted above are subject to forfeiture to the Company or other restrictions that will lapse in accordance with a vesting schedule to be determined by our Board. In the event a recipient's employment or service with the Company terminates, any or all of the shares of common stock held by such recipient that have not vested as of the date of termination under the terms of the restricted stock agreement are forfeited to the Company in accordance with such restricted grant agreement.

Rights to acquire shares of common stock under the restricted stock purchase or grant agreement shall be transferable by the recipient only upon such terms and conditions as are set forth in the restricted stock agreement, as the Board shall determine in its discretion, so long as shares of common stock awarded under the restricted stock agreement remains subject to the terms of the such agreement.

***Issuance of common stock upon conversion of preferred stock***

During the six month period ended June 30, 2014, the Company issued 5,503,000 shares of common stock upon the conversion of 11,006 shares of Series A Convertible Preferred Stock. The conversion shares issued was determined on a formula basis of 500 common shares for each Series A Convertible Preferred Stock held.

**NOTE 4. STOCK OPTIONS AND WARRANTS**

***Stock Options***

As of October 14, 2011, the Company's Board of Directors, based upon the approval and recommendation of the Compensation Committee, approved by unanimous written consent the Company's 2011 Equity Incentive Plan (the "2011 Plan") and form of option agreements for grants under the 2011 Plan. Employees, directors, consultants and advisors of the Company are eligible to participate in the 2011 Plan. The 2011 Plan will be administered by the Board of Directors or the Company's Compensation Committee and has 1,700,000 shares of common stock reserved for issuance in the form of non-qualified options, restricted stock and the grant appreciation rights. No person eligible to participate in the 2011 Plan shall be granted options or other awards during a twelve month period that exceeds 300,000 shares. No options, restricted stock or stock appreciation rights may be granted after ten years of the adoption of the 2011 Plan by the Board of Directors, nor may any option have a term of more than ten years from the date of grant. The exercise price of non qualified options and the base value of a stock appreciation right shall not be less than the fair market value of the common stock on the date of grant. The Company's stockholders did not approve the 2011 Plan within the required one-year period. Accordingly, the Company cannot grant incentive stock options under the 2011 Plan.

A summary of the status of stock options at June 30, 2014, and the changes during the six months then ended, is presented in the following table:

	<b>Shares Under Option</b>	<b>Weighted Average Exercise Price</b>	<b>Weighted Average Remaining Contractual Life</b>	<b>Aggregate Intrinsic Value</b>
Outstanding at December 31, 2013	278,750	\$ 23.10	9.1 years	\$ 1,176,063
Granted	615,000	6.79	6.8 years	
Exercised	-			
Expired/Forfeited/Cancelled	(25,000)	125.00	7.3 years	
Outstanding at June 30, 2014	<u>868,750</u>	<u>\$ 8.64</u>	<u>7.4 years</u>	<u>\$ 425,013</u>
Exercisable at June 30, 2014	<u>183,750</u>	<u>\$ 15.89</u>	<u>7.0 years</u>	<u>\$ 89,895</u>

**LION BIOTECHNOLOGIES, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2014 and 2013**  
**(UNAUDITED)**

On January 6, 2014, the Company granted an option to purchase 100,000 shares of common stock to James G. Bender, Vice President-Manufacturing, in accordance with the terms of Dr. Bender's employment agreement. The stock options have an exercise price of \$9.60 and will vest in three installments as follows: Options for the purchase of 33,333 shares vest on January 6, 2015; and the remaining shares vest quarterly over the next two years after January 6, 2015.

On February 2014, the Company entered into consulting agreements with three consultants that provided for the grant of options to purchase an aggregate of 60,000 shares of its common stock with exercise prices ranging from \$4.94 to \$5.52 per share. These options vested immediately. Also, on February 2014, the Company entered into another consulting agreement with a consultant that provided for the grant of options to purchase 200,000 shares of its common stock at an exercise price of \$5.60 per share. The options were to vest as follows: a) 66,000 shares vested on the one year anniversary and b) 184,000 shares vest in equal quarterly installments over the remaining two-year of the agreement.

On May 15, 2014, the Company granted an option to purchase 75,000 shares of common stock to Michael Handelman, Chief Financial Officer, in accordance with the terms of Mr. Handelman's new employment agreement. The stock options have an exercise price of \$7.95 and will vest in three installments as follows: Options for the purchase of 25,000 shares vest on May 15, 2015; and the remaining shares vest annually over the next two years after May 15, 2015.

On June 13, 2014, the Company granted an option to purchase 180,000 shares of common stock to Laszlo Radvanyi, PhD, its newly appointed Chief Scientific Officer. The stock options have an exercise price of \$6.51 and will vest in three installments as follows: Options for the purchase of 60,000 shares vest on June 13, 2015; and the remaining shares vest annually over the next two years after June 13, 2015.

The aggregate fair value of the options granted in the six months ended June 30, 2014 was \$2,767,000. No options were granted in the six months ended June, 2013. The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model that uses the assumptions noted in the following table. For purposes of determining the expected life of the option, an average of the estimated holding period is used. The risk-free rate for periods within the contractual life of the options is based on the U. S. Treasury yield in effect at the time of the grant.

Expected volatility	228%
Expected dividends	0
Expected average term (in years)	6.50
Risk free rate - average	1.875%
Forfeiture rate	0

During the three and six months ended June 30, 2014, the Company recorded compensation costs of \$902,000 and \$1,340,601, respectively, relating to the vesting of the stock options. During the three and six months ended June 30, 2013, the Company recorded compensation costs of \$133,000 and \$220,418, respectively, relating to the vesting of the stock options. As of June 30, 2014, the aggregate value of unvested options was \$4,178,000, which will continue to be amortized as compensation cost as the options vest over terms ranging from three months to three years, as applicable.



**LION BIOTECHNOLOGIES, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2014 and 2013**  
**(UNAUDITED)**

**Warrants**

A summary of the status of stock warrants at June 30, 2014, and the changes during the six months then ended, is presented in the following table:

	<b>Shares Under Warrants</b>	<b>Weighted Average Exercise Price</b>	<b>Weighted Average Remaining Contractual Life</b>	<b>Aggregate Intrinsic Value</b>
Outstanding at December 31, 2013	12,373,156	\$ 2.51	4.11 years	\$ 31,056,390
Issued	-			
Exercised	(945,392)	2.50		
Expired	-			
Outstanding and exercisable at June 30, 2014	<u>11,427,764</u>	\$ 2.51	4.35 years	\$ 28,692,910

The warrants outstanding at the beginning of the year were granted in the November 2013 Private Placement and have an exercise price of \$2.50 per share. In the six months ended June 30, 2014, the Company received \$2,363,480 in cash from the exercise of warrants for the purchase of 945,392 shares of its common stock.

**NOTE 5. LICENSE AND COMMITMENTS**

***National Institutes of Health and the National Cancer Institute***

Effective August 5, 2011, the Company signed a Cooperative Research and Development Agreement (CRADA) with the National Institutes of Health and the National Cancer Institute (NCI). Under the terms of the five-year cooperative research and development agreement, the Company will work with Steven A. Rosenberg, M.D., Ph.D., chief of NCI's Surgery Branch, to develop adoptive cell immunotherapies that are designed to destroy metastatic melanoma cells using a patient's tumor infiltrating lymphocytes.

The Company will pay the NCI \$250,000 per quarter (\$1,000,000 per year) under the CRADA for Dr. Rosenberg to use for technical, statistical, and administrative support, and research activities, as well as to pay for supplies and travel expenses. Although the CRADA has a five year term, either party to the CRADA has the right to terminate the CRADA upon 60 days' notice to the other party.

During the six months ended June 30, 2014 and 2013, the Company recognized \$500,000 and \$500,000, respectively, of CRADA expenses, which were recorded as part of research and development expenses in the condensed statement of operations. As of June 30, 2014, \$250,000 of these CRADA expenses were outstanding and included in the balance of accrued expenses on the accompanying condensed balance sheet.

**LION BIOTECHNOLOGIES, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2014 and 2013**  
**(UNAUDITED)**

***National Institutes of Health***

Effective October 5, 2011, the Company entered into a Patent License Agreement (the "License Agreement") with the National Institutes of Health, an agency of the United States Public Health Service within the Department of Health and Human Services ("NIH"). Pursuant to the License Agreement, NIH granted to the Company a non-exclusive worldwide right and license to develop and manufacture certain proprietary autologous tumor infiltrating lymphocyte adoptive cell therapy products for the treatment of metastatic melanoma, ovarian cancer, breast cancer, and colorectal cancer. The License Agreement required the Company to pay the NIH approximately \$723,000 of upfront licensing fees and expense reimbursements in 2011, which amounts were included in Research and Development expenses in fiscal 2011. In addition, the Company will have to pay royalties of six percent (6%) of net sales (subject to certain annual minimum royalty payments), a percentage of revenues from sublicensing arrangements, and lump sum benchmark royalty payments on the achievement of certain clinical and regulatory milestones for each of the various indications and other direct cost incurred by NIH pursuant to the agreement. The Company initially intends to focus on the development of licensed products in the metastatic melanoma field of use. If the Company achieves all benchmarks for metastatic melanoma, up to and including the product's first commercial sale in the United States, the total amount of such benchmark payments will be \$6,050,000. The benchmark payments for the other three indications, if all benchmarks are achieved, will be \$6,050,000 for ovarian cancer, \$12,100,000 for breast cancer, and \$12,100,000 for colorectal cancer. Accordingly, if the Company achieves all benchmarks for all four licensed indications, the aggregate amount of benchmark royalty payments that the Company will have to make to NIH will be \$36,300,000.

During the six months ended June 30, 2014 and 2013, there were no net sales subject to certain annual minimum royalty payments or sales that would require us to pay a percentage of revenues from sublicensing arrangements. In addition there were no benchmarks or milestones achieved that would require payment under the lump sum benchmark royalty payments on the achievement of certain clinical and regulatory milestones for each of the various indications.

As of December 31, 2013, \$941,659 was due under the License Agreement with NIH. On January 17, 2014, the Company paid the NIH the entire past due amount of \$941,659 payable to the NIH under the License Agreement. As of June 30, 2014, the Company is current with all of its payment obligations under the License Agreement.

The Company has entered into a Manufacturing Services Agreement with Lonza Walkersville, Inc. (Lonza) to develop and operate a commercial-scale manufacturing process for the TIL therapy. In June 2014 we commenced transferring our TIL manufacturing protocols from the NCI to Lonza, and we engaged Lonza to commence setting up a centralized TIL manufacturing center for our planned multicenter, pivotal clinical trials.

**NOTE 6. RELATED PARTY TRANSACTIONS**

***Accrued Payroll and Fees***

As of June 30, 2014 and December 31, 2013, the Company had accrued the unpaid salaries of its officers and fees due to former members of the Company's board of directors in the amount of \$239,356 and \$338,731, respectively, which is included in accrued expenses in the accompanying condensed balance sheet.

**LION BIOTECHNOLOGIES, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2014 and 2013**  
**(UNAUDITED)**

**NOTE 7. LEGAL PROCEEDINGS**

On April 23, 2014, the Company received a subpoena from the Securities Exchange Commission (the "SEC") that stated that the staff of the SEC is conducting an investigation *In the Matter of Galena Biopharma, Inc. File No. HO 12356* (now known as "*In the Matter of Certain Stock Promotions*") and that the subpoena was issued to the Company as part of the foregoing investigation. The SEC's subpoena and accompanying letter do not indicate whether the Company is, or is not, under investigation. The Company is cooperating with the SEC and has completed its production of documents in response to the subpoena.

The subpoena requires the Company to give the SEC, among other materials, all communications between anyone at the Company and certain persons and entities (which include investor-relations firms and persons associated with the investor-relations firms), all documents related to the listed persons and entities, all articles regarding the Company posted on certain equity research or other financial websites, and documents and communications related to individuals who post or have posted articles regarding the Company on equity research or other financial websites.

*Theorem Group, LLC vs. Lion Biotechnologies, Inc. (Case No.: BC550529)*. On July 2, 2014, Theorem Group, LLC filed a complaint for damages against the Company in the Superior Court of the State of California, Los Angeles County. Prior to relocating its offices to its current location in Woodland Hills, California, the Company subleased its offices from Theorem Group, LLC. In addition, Theorem Group, LLC occasionally made loans to the Company. In its complaint, Theorem Group, LLC alleges that the Company breached the sublease and owes Theorem Group, LLC \$138,719 under the sublease for unpaid rent and other expenses. In addition, Theorem Group, LLC alleges that it made a \$10,000 loan to the Company on March 18, 2013, and that Theorem Group, LLC and the Company orally agreed that Theorem Group, LLC could convert the \$10,000 loan in the May 2013 Restructuring. Theorem Group, LLC alleges that the \$10,000 loan was neither repaid nor converted in the Restructuring and, as a result, that Theorem Group, LLC is entitled to damages of \$150,000. The foregoing complaint was served on July 23, 2014, and the Company currently is evaluating the merits of the foregoing allegations.

There are no other pending legal proceedings to which the Company is a party or of which its property is the subject.

**NOTE 8. SUBSEQUENT EVENTS**

***Tampa Lease***

On July 18, 2014, the Company entered into a five -year lease with the University of South Florida Research Foundation for an approximately 5,200 square foot facility located at 3802 Spectrum Boulevard Tampa, Florida 33612. The new facility is part of the University of South Florida research park and will be used as the Company's research and development facilities. The new space currently is being developed and furnished for the Company's research needs and is expected to be available for use by the end of October 2014. The term of the lease shall commence on the earlier of the date when the Company takes possession of the premises or the date that the tenant improvements are substantially completed. The monthly base rent for this facility during the first year of the lease is \$10,443, which amount will increase by 3% annually. The Company has the option to extend the lease term of this facility for an additional five-year period on the same terms and conditions, except that the base rent for the renewal term will be increased in accordance with the applicable consumer price index.

**LION BIOTECHNOLOGIES, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**For the Three and Six Months Ended June 30, 2014 and 2013**  
**(UNAUDITED)**

***Exclusive License Agreement***

On July 21, 2014, the Company entered into an Exclusive License Agreement (the “Moffitt License Agreement”), effective as of June 28, 2014, with the H. Lee Moffitt Cancer Center and Research Institute, Inc. (“Moffitt”) under which the Company received an exclusive, world-wide license to Moffitt’s rights in and to two patent-pending technologies related to methods for improving tumor-infiltrating lymphocytes for adoptive cell therapy. Unless earlier terminated, the term of the license extends until the earlier of the expiration of the last patent related to the licensed technology or 20 years after the effective date of the license agreement.

Pursuant to the Moffitt License Agreement, the Company agreed to pay an upfront licensing fee, payable within 30 days of the effective date of the Moffitt License Agreement, and a patent issuance fee payable upon the issuance of the first U.S. patent covering the subject technology. In addition, the Company agreed to pay milestone license fees upon completion of specified milestones, customary royalties based on a specified percentage of net sales (which percentage is in the low single digits) and sublicensing payments, as applicable, and annual minimum royalties beginning with the first sale of products based on the licensed technologies, which minimum royalties will be credited against the percentage royalty payments otherwise payable in that year. The Company will also be responsible for all costs associated with the preparation, filing, maintenance and prosecution of the patent applications and patents covered by the Moffitt License Agreement related to the treatment of any cancers in the United States, Europe and Japan and in other countries selected that the Company and Moffitt agreed to.

**Appointment of new President and Chief Operating Officer**

On August 21, 2014 we entered into an employment agreement with Elma Hawkins PhD., pursuant to which she agreed to serve as our President and Chief Operating Officer. Since February 2014 Dr. Hawkins has served as our head of clinical development under a consulting agreement. Under the new employment, we agreed to pay Dr. Hawkins an annual salary of \$325,000, the same amount that she was paid under the consulting agreement. As our President and Chief Operating Officer, Dr. Hawkins is also entitled to a year-end incentive bonus of up to 20% of her base salary. Effective as of August 21, 2014, we granted Dr. Hawkins a stock option to purchase 125,000 shares of our common stock at an exercise price of \$6.70, which price is equal to the fair market value of our common stock on that date. The new options vest over three years. Under February 2014 consulting agreement, Dr. Hawkins was granted a non-qualified stock option to purchase an aggregate of 200,000 shares of our common stock, and 200,000 shares of restricted common stock. The previously granted options and shares of restricted stock will remain in effect under the employment agreement. Accordingly, in addition to the 200,000 restricted shares, in the aggregate Dr. Hawkins currently has options for the purchase of 325,000 shares.