Arno Therapeutics, Inc Form 424B3 January 28, 2014
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File No. 333-193115
OFFERING PROSPECTUS
38,671,405 Shares
Common Stock
The selling stockholders identified beginning on page 20 of this prospectus are offering on a resale basis a total of 38,671,405 shares of our common stock, of which 30,258,051 are issuable upon the exercise of outstanding warrants. We will not receive any proceeds from the sale of these shares by the selling stockholders.
Our common stock is quoted on the OTCQB tier of the OTC Markets under the symbol "ARNI." On January 27, 201 the last sale price of our common stock as reported on the OTCQB was \$2.69.
The securities offered by this prospectus involve a high degree of risk.
See "Risk Factors" beginning on page 6.
Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined that this prospectus is truthful or complete. A representation to the contrary is a criminal offense.
The date of this prospectus is January 27, 2014.

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Note Regarding Reverse Stock Split

Effective as of the close of business on October 29, 2013, the Company amended its Certificate of Incorporation to effect a combination of its outstanding Common Stock at a ratio of one-for-eight (the "Reverse Stock Split"). No fractional shares were issued as a result of the Reverse Stock Split, but instead stockholders received cash in lieu of any fractional shares to which they would otherwise have been entitled, based upon the last sale price of the Common Stock on October 29, 2013, as reported on the OTCQB of the OTC Markets. All historical share and per share amounts have been adjusted to reflect the Reverse Stock Split. All stock options and warrants outstanding were appropriately adjusted to give effect to the Reverse Stock Split.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. Because it is a summary, it may not contain all of the information that is important to you. Accordingly, you are urged to carefully review this prospectus in its entirety, including the risks of investing in our securities discussed under the caption "Risk Factors" and the financial statements and other information that is contained in or incorporated by reference into this prospectus or the registration statement of which this prospectus is a part before making an investment decision. Unless the context otherwise requires, hereafter in this prospectus the terms the "Company," "we," "us," or "our" refer to Arno Therapeutics, Inc., a Delaware corporation.

Company Overview

We are a development stage company focused on developing innovative products for the treatment of cancer. The following is a summary of our product development pipeline:

Onapristone - On February 13, 2012, we entered into a license agreement granting us rights to develop and commercialize onapristone, an anti-progestin hormone blocker that has been previously reported to have considerable anti-tumor activity in patients with breast cancer. Onapristone appears to have a unique ability to block the activation of the progesterone receptor and inhibit tumor growth. Onapristone was originally developed by Schering AG for potential use in the treatment of benign gynecological disorders (uterine leiomyoma, endometriosis), as a contraceptive and an anti-endocrine treatment of breast cancer. In published clinical studies, onapristone has demonstrated a 56% objective response rate as a first line "hormone" treatment of patients with breast cancer. In connection with the development of onapristone, we have engaged Leica Biosystems to perform a feasibility study leading to the development of an immunohistochemistry based diagnostic test to identify tumors with the activated form of the progesterone receptor, which may identify which patients are more likely to benefit from treatment with onapristone. We have also engaged Clarient Diagnostic Services, Inc. to perform the interpretation/analysis of tumor samples with the developed diagnostic test. We completed initial pre-clinical toxicology studies that enabled the submission of an Investigational Medicinal Product Dossier, or IMPD, the foreign equivalent of an investigational new drug application, or IND, in the second quarter of 2013 to support a pharmacokinetic/food effect study, which we completed in the fourth quarter of 2013. We also submitted an IMPD to support the conduct of a Phase I study in patients with progesterone receptor expressing cancers in the third quarter of 2013. We initiated this study in the fourth quarter of 2013 and began enrolling patients in early 2014. We are also investigating onapristone as a potential treatment for patients with prostate cancer and have submitted an IMPD in the fourth quarter of 2013 with the intent of starting a Phase I clinical study in adult male subjects with castrate resistant prostate cancer during the first quarter of 2014.

AR-42 – AR-42 is being developed as an orally available, broad spectrum inhibitor of both histone and non-histone deacetylation proteins, or Pan-DAC, which play an important role in the regulation of gene expression, cell growth and survival. In preclinical studies, AR-42 has demonstrated greater potency and activity in solid tumors and hematological malignancies when compared to vorinostat (also known as SAHA and marketed as Zolinza® by Merck). These data demonstrate the potent and potential differentiating activity of AR-42. Additionally, pre-clinical findings presented at the 2009 American Society of Hematology Annual Meeting showed that AR-42 potently and selectively inhibits leukemic stem cells in acute myeloid leukemia, or AML. AR-42 is currently being studied in an investigator-initiated Phase I/II clinical study in adult subjects with relapsed or refractory hematological malignancies: multiple myeloma, chronic lymphocytic leukemia (CLL), or lymphoma. The recommended Phase II dose, or RP2D, in patients with hematological malignancies has been determined and the expansion phase of the program has been initiated. We expect that the expansion phase of the hematological malignancy cohort will take at least 12 months to complete. The protocol has been amended to include a separate solid tumor dose escalation cohort and patients are being actively screened to enter into this cohort. We are also supporting an investigator initiated Phase I study of AR-42 in combination with decitabine in patients with hematological malignancies that was initiated during the third quarter of 2013. In preclinical studies, AR-42 has demonstrated anti-tumor activity in both meningioma and schwannoma. Meningioma and schwannoma are rare, benign tumors that can present in different locations within the brain and the spinal cord and may cause substantial morbidity for those affected individuals. The primary treatment option for patients with these tumors is surgical excision. In February 2012, the FDA granted two orphan drug designations for AR-42 for the treatment of meningioma and the treatment of schwannoma of the central nervous system. Additionally, AR-42 has been granted three orphan-drug designations by the European Medicines, or EMA, for the treatment of neurofibromatosis type 2 (NF2), the treatment of meningioma and the treatment of schwannoma. NF2 is a rare genetic disorder characterized by the growth of noncancerous tumors in the brain and spinal cord, juvenile cataracts, and neurofibromas of the skin.

AR-12 – We are also developing AR-12 as an orally available, targeted anti-cancer agent that has been shown in early pre-clinical studies to inhibit phosphoinositide dependent protein kinase-1, or PDK-1, a protein in the PI3K/Akt pathway that is involved in the growth and proliferation of cells, including cancer cells. We believe AR-12 may also cause cell death through the induction of stress in the endoplasmic reticulum and work is ongoing to further understand the mechanism of action. Preliminary data demonstrates that AR-12 may inhibit multiple different kinase targets. In May 2009, the FDA accepted our IND for AR-12. We are currently conducting a multi-centered Phase I clinical study of AR-12 in adult patients with advanced or recurrent solid tumors or lymphoma. The Phase I study of AR-12 was originally designed to be conducted in two parts. The first part is a dose-escalating study, which we refer to as the Escalation Phase, primarily designed to evaluate the safety of AR-12 in order to identify the MTD and RP2D for future studies of the compound. We have completed the dose escalation phase of the Phase I trial, and have determined the RP2D and MTD of the current formulation. Following the Escalation Phase, we planned to initiate the second part of the study, which we refer to as the Expansion Phase, which would have involved enrolling an expanded cohort of additional patients at the RP2D in multiple tumor types. We will not be moving forward with the Expansion Phase of this study as an improved formulation that has been shown to substantially increase bioavailability in preclinical models has been developed. During the first quarter of 2013, the last study subject completed the planned dose-escalation phase of the study.

In June 2008, we were acquired by Laurier International, Inc., a Delaware corporation, in a "reverse" merger whereby a wholly-owned subsidiary of Laurier merged with and into Arno Therapeutics, with Arno Therapeutics remaining as the surviving corporation and a wholly-owned subsidiary of Laurier. In accordance with the terms of this merger, stockholders of Arno Therapeutics exchanged all of their shares of common stock of Arno Therapeutics for shares of Laurier common stock at a rate of 1.99377 shares of Laurier common stock for each share of Arno Therapeutics common stock. As a result of the issuance of the shares of Laurier common stock to the former Arno Therapeutics stockholders, following the merger the former stockholders of Arno Therapeutics held 95 percent of the outstanding common stock of Laurier, assuming the issuance of all shares underlying outstanding options and warrants. Upon completion of the merger, all of the former officers and directors of Laurier resigned and were replaced by the officers and directors of Arno Therapeutics. Additionally, following the merger Laurier changed its name to Arno Therapeutics, Inc.

Our executive offices are located at 200 Route 31 North, Suite 104, Flemington, New Jersey 08822. Our telephone number is (862) 703-7170. Our website is *www.arnothera.com*. Information contained in, or accessible through, our website does not constitute a part of this prospectus.

Risk Factors

As with most biopharmaceutical product candidates, the development of our product candidates is subject to numerous risks, including the risk of delays in or discontinuation of development from lack of financing, inability to obtain necessary regulatory approvals to market the products, unforeseen safety issues relating to the products and dependence on third party collaborators to conduct research and development of the products. Because we are a

development stage company with a very limited history of operations, we are also subject to many risks associated with early-stage companies. For a more detailed discussion of some of the risks you should consider before purchasing shares of our common stock, you are urged to carefully review and consider the section entitled "Risk Factors" beginning on page 6 of this prospectus.

The Offering

The selling stockholders identified beginning on page 20 of this prospectus are offering on a resale basis a total of 38,671,405 shares of our common stock, of which 30,258,051 are issuable upon the exercise of outstanding warrants. The total value of all the common stock offered pursuant to this prospectus is approximately \$104.4 million, based upon a per share price of \$2.70, which represents the average of the high and low prices of our common stock as reported on the OTCQB on January 27, 2014.

Common stock offered 38,671,405 shares

Common stock

outstanding before the

offering (1)

20,370,910 shares

Common stock

outstanding after the

offering (2)

50,628,961 shares

Use of Proceeds

We will receive none of the proceeds from the sale of the shares by the selling stockholders, except for the warrant exercise price upon exercise of the warrants, which would be used for

working capital and other general corporate purposes.

OTCQB Symbol ARNI

- (1) Based on the number of shares outstanding as of January 27, 2014, not including 54,328,277 shares issuable upon exercise of various warrants and options to purchase our common stock.
- (2) Assumes the issuance of all shares offered hereby that are issuable upon exercise of warrants.

Recent Developments

2013 Offering

On October 29, 2013, we entered into a Securities Purchase Agreement with certain purchasers identified therein pursuant to which we sold and the purchasers purchased an aggregate of 12,868,585 units of our securities, which are referred to in this prospectus as the Units. Each Unit consisted of the following:

either (a) one share of common stock or (b) a five-year common stock warrant to purchase one share of common stock at an exercise price of \$0.01 per share, referred to as the Series C Warrants;

a five-year warrant to purchase one share of common stock at an exercise price of \$4.00 per share, referred to as the Series D Warrants; and

a warrant, expiring on October 31, 2014, to purchase one share of common stock at an exercise price of \$2.40 per ·share, referred to as the Series E Warrants, and together with the Series C Warrants and the Series D Warrants, the 2013 Warrants.

We sold 8,413,354 Units consisting of shares of common stock, Series D Warrants and Series E Warrants at a purchase price of \$2.40 per Unit, and 4,455,231 Units consisting of Series C Warrants, Series D Warrants and Series E Warrants at a purchase price of \$2.39 per Unit, for total gross proceeds to us of \$30.84 million, before deducting fees and other transaction related expenses of approximately \$750,000. A closing of the sale of 12,826,752 Units was completed on October 29, 2013, and the sale of the remaining 41,833 Units was completed on October 30, 2013. These transactions are referred to as the 2013 Offering. The terms and conditions of the 2013 Offering are more fully described in this prospectus under the caption "Description of 2013 Offering."

Conversion of 2012 Debentures

On October 29, 2013, we also entered into a Conversion Agreement with all of the holders of our three-year 8% Senior Convertible Debentures, or Debentures, issued on November 26, 2012 and December 18, 2012, in the original principal amount of \$14,857,200. Pursuant to the Conversion Agreement, the holders agreed to convert the entire outstanding principal amount of their Debentures, together with accrued and unpaid interest through October 29, 2013, into shares of our common stock at a conversion price of \$2.40 per share for a total of approximately 6,530,154 shares. As additional consideration for their agreement to convert the Debentures, we provided each holder with one year of additional accrued interest at 8% per annum and extended the term of the Series B Warrants issued to the holders in connection with their initial purchase of the Debentures to October 31, 2014. The additional year of accrued interest was satisfied by the issuance of shares of common stock at a price of \$2.40 per share for a total additional issuance of approximately 494,764 shares of common stock. We recorded the inducement to convert the debentures as additional interest expense. As a result of such conversion, all of our obligations under the Debentures are fully satisfied.

Agreement with OPKO Health, Inc.

On October 29, 2013, in connection with the entry into the Purchase Agreement, we entered into an agreement with OPKO Health, Inc. and Frost Group, LLC, which is referred to in this prospectus as the OPKO Agreement. Under the terms of the OPKO Agreement, as in inducement to the participation by OPKO and Frost Group (or its affiliates and associates) in the 2013 Offering, we granted OPKO the right to appoint a non-voting observer to attend all meetings of our board of directors, provided that such appointee enters into a confidentiality agreement with us and shall be subject to all applicable Company policies; and (2) OPKO shall have a right of first negotiation that provides it with exclusive rights to negotiate with the company for a 45-day period regarding any potential strategic transactions that our board of directors elects to pursue. Such rights continue so long as OPKO continues to hold at least 3% of the total number of outstanding shares of our common stock, determined on a fully-diluted basis (i.e., assuming the issuance of all shares underlying outstanding options, warrants and other rights to acquire common stock.

RISK FACTORS

Investment in our common stock involves significant risk. You should carefully consider the information described in the following risk factors, together with the other information appearing elsewhere in this prospectus, before making an investment decision regarding our common stock. If any of these risks actually occur, our business, financial conditions, results of operations and future growth 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. Moreover, the risks described below are not the only ones that we face.

Risks Relating to Our Business

We currently have no product revenues and will need to raise substantial additional capital to operate our business.

To date, we have generated no product revenues. Until, and unless, we receive approval from the FDA and other regulatory authorities for our product candidates, we cannot sell our drugs and will not have product revenues. Currently, none of our product candidates are approved for sale by the FDA. Therefore, for the foreseeable future, we will have to fund all of our operations and capital expenditures from cash on hand and, potentially, future offerings of our equity and debt securities. Based on our current development plans, and taking into account the net proceeds from our 2013 Offering, we believe we have cash on hand to fund our operations through approximately the fourth quarter of 2014. We will require substantial additional funds to support our continued research and development activities, and the anticipated costs of preclinical studies and clinical trials, regulatory approvals and eventual commercialization. There can be no assurance that such additional financing can be obtained on desirable terms, if at all. In addition, changes may occur that would consume our available capital before that time, including changes in and progress of our development activities, acquisitions of additional product candidates and changes in regulation. Accordingly, we will need additional capital to fund our continuing operations. Since we do not generate any recurring revenue, the most likely sources of such additional capital include private placements of our equity securities, including our common stock, debt financing or funds from a potential strategic licensing or collaboration transaction involving the rights to one or more of our product candidates. To the extent that we raise additional capital by issuing equity securities, our stockholders will likely experience dilution, which may be significant depending on the number of shares we may issue and the price per share. If we raise additional funds through collaborations and licensing arrangements, it may be necessary to relinquish some rights to our technologies, product candidates or products, or grant licenses on terms that are not favorable to us. If we raise additional funds by incurring debt, we could incur significant interest expense and become subject to covenants in the related transaction documentation that could affect the manner in which we conduct our business.

We currently have no committed sources of additional capital and our access to capital funding is always uncertain. This uncertainty is exacerbated due to the global economic turmoil of the last few years, which continues to severely

restrict access to the U.S. and international capital markets, particularly for small biopharmaceutical and biotechnology companies like us. Accordingly, despite our ability to secure adequate capital in the past, there is no assurance that additional equity or debt financing will be available to us when needed, on acceptable terms or even at all. If we fail to obtain the necessary additional capital when needed, we may be forced to significantly curtail our planned research and development activities, which will cause a delay in our drug development programs and may severely harm our business.

We are a development stage company.

We have not received any operating revenues to date and are in the development stage. You should be aware of the problems, delays, expenses and difficulties encountered by an enterprise in our stage of development, and particularly for companies engaged in the development of new biotechnology or biopharmaceutical product candidates, many of which may be beyond our control. These include, but are not limited to, problems relating to product development, testing, regulatory compliance, manufacturing, marketing, costs and expenses that may exceed current estimates and competition. No assurance can be given that our existing product candidates, or any technologies or products that we may acquire in the future will be successfully developed, commercialized and accepted by the marketplace or that sufficient funds will be available to support operations or future research and development programs.

We are not currently profitable and may never become profitable.

We expect to incur substantial losses and negative operating cash flows for the foreseeable future, and we may never achieve or maintain profitability. For the nine months ended September 30, 2013, we had a net loss of \$15.9 million, and for the years ended December 31, 2012 and 2011, we had a net loss of \$14.4 million and \$7.9 million, respectively. For the period from our inception on August 1, 2005 through September 30, 2013, we had a net loss of \$65.8 million. Even if we succeed in developing and commercializing one or more of our product candidates, we expect to incur substantial losses for the foreseeable future, as we:

·continue to undertake pre-clinical development and clinical trials for our product candidates;
·seek regulatory approvals for our product candidates;
·in-license or otherwise acquire additional products or product candidates;
·seek patent protection for our product candidates;
·implement additional internal systems and infrastructure; and
·hire additional personnel.
Further, for the nine months ended September 30, 2013, we have had negative cash flows from operating activities of \$9.4 million, and for the years ended December 31, 2012 and 2011, we had negative cash flows from operating activities of \$9.4 million and \$6.8 million, respectively. Since inception on August 1, 2005 through September 30, 2013, we had negative cash flows from operating activities of \$47.5 million. We expect to continue to experience negative cash flows for the foreseeable future as we fund our operating losses and capital expenditures. As a result, will need to generate significant revenues in order to achieve and maintain profitability. We may not be able to generate these revenues or achieve profitability in the future. Our failure to achieve or maintain profitability could negatively impact the value of our common stock.
We have a limited operating history upon which to base an investment decision.
We are a development stage company and have not demonstrated our ability to perform the functions necessary for the successful commercialization of any of our product candidates. The successful commercialization of our product candidates will require us to perform a variety of functions, including:
·continuing to undertake pre-clinical development and clinical trials for our product candidates;
participating in regulatory approval processes;

formulating and manufacturing

products; and

·conducting sales and marketing activities.

Our operations have been limited to organizing our company, acquiring, developing and securing our proprietary technologies and performing pre-clinical and clinical trials of our product candidates. These operations provide a limited basis for you to assess our ability to commercialize our product candidates and the advisability of investing in our securities.

We may not successfully manage our growth.

Our success will depend upon the expansion of our operations and the effective management of our growth, which will place a significant strain on our management and on our administrative, operational and financial resources. To manage this growth, we may need to expand our facilities, augment our operational, financial and management systems and hire and train additional qualified personnel. If we are unable to manage our growth effectively, our business would be harmed.

The relationships between Two River Consulting, Riverbank Capital Securities and certain of our officers and directors may present potential conflicts of interest.

Arie S. Belldegrun, M.D., our Chairman, David M. Tanen, one of our directors, and Joshua A. Kazam, a co-founder and director of our company until September 2010, are the managing members of Two River Consulting, LLC, or TRC. Mr. Tanen serves as our Secretary and, from June 2009 until April 2011, also served as our President. In June 2009, we entered into a services agreement with TRC pursuant to which it performs various management, clinical development, operational and administrative activities and services for us. As consideration for these services, we paid TRC a monthly cash fee of \$55,000. While the term of the services agreement expired on April 1, 2011, we continue to utilize the services of TRC and TRC is now billing the Company for actual hours worked on a monthly basis. For the second through fourth quarters of 2011, TRC billed us \$287,145 for services rendered, an average of approximately \$31,900 per month. During the year ended December 31, 2012, TRC billed us \$273,171 for services rendered, an average of approximately \$22,750 per month. For the nine months ended September 30, 2013, TRC billed us approximately \$218,000 for services rendered, an average of approximately \$24,200 per month. Each of Messrs, Kazam and Tanen, as well as Peter M. Kash, a co-founder and director of our company until April 2011, are also officers and directors of Riverbank Capital Securities, Inc. or Riverbank, a broker-dealer registered with the Financial Industry Regulatory Agency, or FINRA, which served as placement agent in connection with our September 2010 private placement of Series A Preferred Stock. Scott L. Navins, the Financial and Operations Principal of Riverbank and Chief Financial Officer of TRC, serves as our Treasurer.

Generally, Delaware corporate law requires that any transactions between us and any of our affiliates be on terms that, when taken as a whole, are substantially as favorable to us as those then reasonably obtainable from a person who is not an affiliate in an arms-length transaction. We believe that the terms of the agreements that we have entered into with TRC and Riverbank satisfy the requirements of Delaware law, but in the event one or more parties challenges the fairness of such terms we may have to expend substantial resources in resolving such challenges and can make no guarantees of the result. Further, none of our affiliates or TRC is obligated pursuant to any agreement or understanding with us to make any additional products or technologies available to us, nor can there be any assurance, and the investors should not expect, that any biomedical or pharmaceutical product or technology identified by such affiliates or TRC in the future will be made available to us.

In addition to the relationships and transactions described above, each of Dr. Belldegrun, Dr. Kash, and Messrs. Kazam and Tanen are significant stockholders and serve as officers and directors of other biopharmaceutical and biotechnology companies some of which may be considered a potential competitor of ours. See "Directors and Executive Officers" for additional information about the activities of Dr. Belldegrun and Mr. Tanen. Certain of our other current officers and directors or certain of any officers or directors hereafter appointed may from time to time serve as officers or directors of other biopharmaceutical or biotechnology companies. There can be no assurance that such other companies will not have interests in conflict with our own.

We are substantially dependent on the services of various consultants.

We have only seven employees. We currently rely on consultants to render various management, accounting and administrative activities and services for us. We also rely in substantial part, and for the foreseeable future will continue to rely, on certain independent organizations and consultants to provide other important services, including substantially all aspects of regulatory approval, clinical management, and manufacturing. There can be no assurance that the services of independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements.

If we are unable to hire additional qualified personnel in the future, our ability to grow our business may be harmed.

Although we currently engage TRC to provide personnel to perform a variety of management, accounting and other services on our behalf on a consulting basis, we expect to directly hire employees, including at the senior management level, in the future as we further the development of our clinical programs. As we further the development of our product candidates, we intend to hire employees to perform the services currently being rendered by TRC. Accordingly, our ability to attract and retain qualified personnel will be critical to managing and growing our business in the future, especially the hiring and retention of key executive personnel and scientific staff. There is intense competition and demand for qualified personnel in our area of business and no assurances can be made that we will be able to retain the personnel necessary for the development of our business on commercially reasonable terms, if at all.

We may incur substantial liabilities and may be required to limit commercialization of our products in response to product liability lawsuits.

The testing and marketing of medical products entail an inherent risk of product liability. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our products candidates, if approved. Even successful defense against product liability claims would require significant financial and management resources. Regardless of the merit or eventual outcome, product liability claims may result in:

- ·decreased demand for our product candidates;
- ·injury to our reputation;
- · withdrawal of clinical trial participants;
- ·withdrawal of prior governmental approvals;

·costs of related litigation;
·substantial monetary awards to patients;
·product recalls;
·loss of revenue; and
·the inability to commercialize our product candidates.

Because we do not yet have any products approved for sale, we currently do not carry product liability insurance. While we intend to obtain product liability insurance prior to any commercial product sales, such insurance coverage may not be adequate to cover claims against us or available to us at an acceptable cost, if at all. Our inability to obtain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of the pharmaceutical products we develop, alone or with commercialization partners. Even if our agreements with any future commercialization partners entitle us to indemnification against damages from product liability claims, such indemnification may not be available or adequate should any claim arise.

We may incur substantial liabilities in connection with the clinical trials of our product candidates and may be required to cease our clinical trials in response to lawsuits brought by clinical trial participants.

Conducting clinical trials entails an inherent risk of liability resulting from lawsuits brought by clinical trial participants who experience unexpected adverse reactions to our product candidates or as a result of the medical care they receive while participating in a clinical trial. If we cannot successfully defend ourselves against such claims, we may incur substantial liabilities or be required to cease clinical trials of our products candidates, which would have a material adverse effect on our business, financial condition and results of operations. We currently maintain a clinical trial insurance policy with a \$5 million per occurrence and aggregate limit, which may not be adequate to cover claims against us. While our agreements with the research institutions that conduct our clinical trials often provide that the institutions will indemnify us against damages from claims brought by clinical trial participants that result from the institutions' conduct, such indemnification may not be available or adequate should any such claim arise.

We are controlled by current directors and principal stockholders.

Our executive officers, directors and principal stockholders (i.e. those beneficially owning more than 5% of our outstanding voting securities), which include the persons affiliated with TRC discussed above, beneficially own approximately 88.7% of our outstanding voting securities. Accordingly, our executive officers, directors, principal stockholders and certain of their affiliates will have the ability to exert substantial influence over the election of our board of directors and the outcome of issues submitted to our stockholders.

The co-lead investors in our September 2010 private placement own a significant amount of our voting securities and are entitled to substantial governance rights that may limit our management's autonomy.

The three co-lead investors in our September 2010 private placement, Pontifax (investing through three affiliated funds: Pontifax (Cayman) II L.P., Pontifax (Israel) II Individual Investors L.P., and Pontifax (Israel) II L.P., which we collectively refer to as "Pontifax"), Commercial Street Capital, LLC ("Commercial Street Capital"), and UTA Capital LLC ("UTA Capital") beneficially own approximately 15.2%, 19.3%, and 1.9% of our outstanding common stock, respectively. In addition, pursuant to the terms of the purchase agreement that we entered into with the investors in our 2010 private placement, each co-lead investor has the right to designate one individual to be appointed to our board of directors, subject to certain ownership and other requirements and conditions. Moreover, the 2010 purchase agreement provides that each such director has the right to serve on any or all of the committees of our board of directors. The purchase agreement also provides that the affirmative vote of each such investor-designated director then in office shall be required to approve the appointment of our chief executive officer and to authorize certain transactions between us and one of our officers, directors, principal stockholders or their affiliates. Pursuant to their rights under the purchase agreement, Pontifax, Commercial Street Capital, and UTA Capital designated Tomer Kariy, Steven Ruchefsky, and Yacov Reizman, respectively, for appointment to our board of directors. This concentration of ownership and governance rights among the co-lead investors may not be in the best interests of all our stockholders. The co-lead investors will be able to exert significant control over our management and affairs requiring stockholder approval, including approval of significant corporate transactions. Such concentration of voting power could have the effect of delaying or preventing a change of control or other business combination, and may adversely affect the market price of our common stock.

We are required to maintain finance and accounting systems, procedures and controls in order to satisfy requirements under the securities laws, including the Sarbanes-Oxley Act of 2002, which increase our costs and divert management's time and attention.

We have established processes, controls and procedures that allow our management to report on our internal controls over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act. As a company with limited capital and human resources, the diversion of management's time and attention away from our business to ensure compliance with these regulatory requirements may have a material adverse effect on our business, financial condition and results of operations.

In the event we identify significant deficiencies or material weaknesses in our internal controls over financial reporting that we cannot remediate in a timely manner, investors and others may lose confidence in the reliability of our financial statements. If this occurs, the trading price of our common stock, if any, and our ability to obtain any necessary financing could suffer. In addition, in the event that our independent registered public accounting firm is unable to rely on our internal controls over financial reporting in connection with its audit of our financial statements, and in the further event that it is unable to devise alternative procedures in order to satisfy itself as to the material accuracy of our financial statements and related disclosures, we may be unable to file our periodic reports with the SEC. This would likely have an adverse effect on the trading price of our common stock, if any, and our ability to secure any necessary additional financing, and could result in the delisting of our common stock if we are listed on an exchange in the future. In such event, the liquidity of our common stock would be severely limited and the market price of our common stock would likely decline significantly.

Risks Relating to the Clinical Testing, Regulatory Approval, Manufacturing

and Commercialization of Our Product Candidates

We may not obtain the necessary U.S. or worldwide regulatory approvals to commercialize our product candidates.

We will need FDA approval to commercialize our product candidates in the U.S. and approvals from the FDA equivalent regulatory authorities in foreign jurisdictions to commercialize our product candidates in those jurisdictions. In order to obtain FDA approval of any of our product candidates, we must submit to the FDA a new drug application, or NDA, demonstrating that the product candidate is safe for humans and effective for its intended use. This demonstration requires significant research and animal tests, which are referred to as pre-clinical studies, as well as human tests, which are referred to as clinical trials. Satisfaction of the FDA's regulatory requirements typically takes many years, depends upon the type, complexity and novelty of the product candidate and requires substantial resources for research, development and testing. We cannot predict whether our research and clinical approaches will result in drugs that the FDA considers safe for humans and effective for indicated uses. The FDA has substantial discretion in the drug approval process and may require us to conduct additional pre-clinical and clinical testing or to

perform post-marketing studies. The approval process may also be delayed by changes in government regulation, future legislation or administrative action or changes in FDA policy that occur prior to or during our regulatory review. Delays in obtaining regulatory approvals may:

- ·delay commercialization of, and our ability to derive product revenues from, our product candidates;
- ·impose costly procedures on us; or
- ·diminish any competitive advantages that we may otherwise enjoy.

Even if we comply with all FDA requests, the FDA may ultimately reject one or more of our NDAs. We cannot be sure that we will ever obtain regulatory clearance for our product candidates. Failure to obtain FDA approval of any of our product candidates will severely undermine our business by reducing our number of salable products and, therefore, corresponding product revenues.

In foreign jurisdictions, we must receive approval from the appropriate regulatory authorities before we can commercialize our drugs. Foreign regulatory approval processes generally include all of the risks associated with the FDA approval procedures described above. We cannot assure that we will receive the approvals necessary to commercialize our product candidate for sale outside the U.S.

All of our product candidates are in the very early stages of development and will require extensive clinical trials before they may be approved for marketing. Clinical trials are very expensive and time-consuming. Any failure or delay in completing clinical trials for our product candidates could harm our business.

All of our current product candidates are in early stages of development and will require extensive clinical and other testing and analysis before we will be in a position to consider seeking regulatory approval to sell such product candidates. Conducting clinical trials is a lengthy, time consuming and very expensive process and the results are inherently uncertain. The duration of clinical trials can vary substantially according to the type, complexity, novelty and intended use of the product candidate. We estimate that clinical trials of our product candidates will take at least several years to complete. The completion of clinical trials for our product candidates may be delayed or prevented by many factors, including without limitation:

- ·delays in patient enrollment, and variability in the number and types of patients available for clinical trials;
- ·difficulty in maintaining contact with patients after treatment, resulting in incomplete data;
- ·poor effectiveness of product candidates during clinical trials;
- ·safety issues, side effects, or other adverse events;
- ·results that do not demonstrate the safety or effectiveness of the product candidates;
- · governmental or regulatory delays and changes in regulatory requirements, policy and guidelines; and
- ·varying interpretation of data by the FDA or equivalent foreign regulatory authority.

In conducting clinical trials, we may fail to establish the effectiveness of a compound for the targeted indication or discover that it is unsafe due to unacceptable side effects or other reasons. Even if our clinical trials are commenced and completed as planned, their results may not support our product candidate claims. Further, failure of product candidate development can occur at any stage of clinical trials, or even thereafter, and we could encounter problems that cause us to abandon or repeat clinical trials. These problems could interrupt, delay or halt clinical trials for our product candidates and could result in FDA, or other regulatory authorities, delaying or declining approval of our product candidates for any or all indications. The results from pre-clinical testing and prior clinical trials may not be predictive of results obtained in later or other larger clinical trials. A number of companies in the pharmaceutical industry have suffered significant setbacks in clinical trials, even in advanced clinical trials after showing promising results in earlier clinical trials. Our failure to adequately demonstrate the safety and effectiveness of any of our product candidates will prevent us from receiving regulatory approval to market these product candidates and will negatively impact our business. In addition, we or the FDA may suspend or curtail our clinical trials at any time if it appears that we are exposing participants to unacceptable health risks or if the FDA finds deficiencies in the conduct of these clinical trials or in the composition, manufacture or administration of the product candidates. Accordingly, we cannot predict with any certainty when or if we will ever be in a position to submit a new drug application, or NDA, for any of our product candidates, or whether any such NDA would ever be approved.

Our products use novel alternative technologies and therapeutic approaches, which have not been widely studied.

Our product development efforts focus on novel therapeutic approaches and technologies that have not been widely studied. These approaches and technologies may not be successful. We are applying these approaches and technologies in our attempt to discover new treatments for conditions that are also the subject of research and development efforts of many other companies.

Physicians and patients may not accept and use our drugs.

Even if the FDA approves our product candidates, physicians and patients may not accept and use them. Acceptance and use of our products will depend upon a number of factors including:

perceptions by members of the health care community, including physicians, about the safety and effectiveness of our drugs;

·cost-effectiveness of our products relative to competing products;

availability of reimbursement for our products from government or other healthcare payers; and

·effectiveness of marketing and distribution efforts by us and our licensees and distributors, if any.

Because we expect sales of our current product candidates, if approved, to generate substantially all of our product revenues for the foreseeable future, the failure of any of these drugs to find market acceptance would harm our business and could require us to seek additional financing.

Because we are dependent on clinical research organizations and other contractors for clinical testing and for research and development activities, the results of our clinical trials and such research activities are, to a certain extent, not within our control.

We depend upon independent investigators and collaborators, such as universities and medical institutions, to conduct our pre-clinical and clinical trials under agreements with us. These parties are not our employees and we cannot control the amount or timing of resources that they devote to our programs. These investigators may not assign as great a priority to our programs or pursue them as diligently as we would if we were undertaking such programs ourselves. If outside collaborators fail to devote sufficient time and resources to our drug development programs, or if their performance is substandard, the approval of our FDA applications, if any, and our introduction of new drugs, if any, will be delayed. These collaborators may also have relationships with other commercial entities, some of whom may compete with us. If our collaborators assist our competitors at our expense, our competitive position would be harmed.

Our reliance on third parties to formulate and manufacture our product candidates exposes us to a number of risks that may delay the development, regulatory approval and commercialization of our products or result in higher product costs.

We have no direct experience in drug formulation or manufacturing and do not intend to establish our own manufacturing facilities. We lack the resources and expertise to formulate or manufacture our own product candidates. Instead, we will contract with one or more manufacturers to manufacture, supply, store and distribute drug supplies for our clinical trials. If any of our product candidates receive FDA approval, we will rely on one or more third-party contractors to manufacture our drugs. Our anticipated future reliance on a limited number of third-party manufacturers exposes us to the following risks:

We may be unable to identify manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA must approve any replacement contractor. This approval would require new testing and compliance inspections. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, production of our products after receipt of FDA approval, if any.

Our third-party manufacturers might be unable to formulate and manufacture our drugs in the volume and of the quality required to meet our clinical and/or commercial needs, if any.

Our future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products.

Drug manufacturers are subject to ongoing periodic unannounced inspection by the FDA and corresponding state agencies to ensure strict compliance with good manufacturing practice and other government regulations and corresponding foreign standards. We do not have control over third-party manufacturers' compliance with these regulations and standards, but we will be ultimately responsible for any of their failures.

If any third-party manufacturer makes improvements in the manufacturing process for our products, we may not ·own, or may have to share, the intellectual property rights to the innovation. This may prohibit us from seeking alternative or additional manufacturers for our products.

Each of these risks could delay our clinical trials, the approval, if any, of our product candidates by the FDA, or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenues.

We have no direct experience selling, marketing or distributing products and no internal capability to do so.

We currently have no sales, marketing or distribution capabilities. We do not anticipate having resources in the foreseeable future to allocate to the sales and marketing of our proposed products. Our future success depends, in part, on our ability to enter into and maintain sales and marketing collaborative relationships, the collaborator's strategic interest in the products under development and such collaborator's ability to successfully market and sell any such products. We intend to pursue collaborative arrangements regarding the sales and marketing of our products, however, there can be no assurance that we will be able to establish or maintain such collaborative arrangements, or if able to do so, that they will have effective sales forces. To the extent that we decide not to, or are unable to, enter into collaborative arrangements with respect to the sales and marketing of our proposed products, significant capital expenditures, management resources and time will be required to establish and develop an in-house marketing and sales force with technical expertise. There can also be no assurance that we will be able to establish or maintain relationships with third-party collaborators or develop in-house sales and distribution capabilities. To the extent that we depend on third parties for marketing and distribution, any revenues we receive will depend upon the efforts of such third parties, and there can be no assurance that such efforts will be successful. In addition, there can also be no assurance that we will be able to market and sell our product in the U.S. or overseas.

If we cannot compete successfully for market share against other drug companies, we may not achieve sufficient product revenues and our business will suffer.

The market for our product candidates is characterized by intense competition and rapid technological advances. If our product candidates receive FDA approval, they will compete with a number of existing and future drugs and therapies developed, manufactured and marketed by others. Existing or future competing products may provide greater therapeutic convenience or clinical or other benefits for a specific indication than our products, or may offer comparable performance at a lower cost. If our products fail to capture and maintain market share, we may not achieve sufficient product revenues and our business will suffer.

We will compete against fully integrated pharmaceutical companies and smaller companies that are collaborating with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Many of these competitors have technologies already approved or in development. In addition, many of these competitors, either alone or together with their collaborative partners, operate larger research and development programs and have substantially greater financial resources than we do, as well as significantly greater experience in:

- ·developing drugs;
- ·undertaking pre-clinical testing and human clinical trials;
- ·obtaining FDA and other regulatory approvals of drugs;
- ·formulating and manufacturing drugs; and
- ·launching, marketing and selling drugs.

Developments by competitors may render our products or technologies obsolete or non-competitive.

The biotechnology and pharmaceutical industries are intensely competitive and subject to rapid and significant technological change. The drugs that we are attempting to develop will have to compete with existing therapies. In addition, a large number of companies are pursuing the development of pharmaceuticals that target the same diseases and conditions that we are targeting. We face competition from pharmaceutical and biotechnology companies in the U.S. and abroad. In addition, companies pursuing different but related fields represent substantial competition. Many of these organizations competing with us have substantially greater capital resources, larger research and development staffs and facilities, longer drug development history in obtaining regulatory approvals and greater manufacturing and

marketing capabilities than we do. These organizations also compete with us to attract qualified personnel and parties for acquisitions, joint ventures or other collaborations.

Our ability to generate product revenues will be diminished if our drugs sell for inadequate prices or patients are unable to obtain adequate levels of reimbursement.

Our ability to commercialize our drugs, alone or with collaborators, will depend in part on the extent to which reimbursement will be available from:

- ·government and health administration authorities;
- ·private health maintenance organizations and health insurers; and
- ·other healthcare payers.

Significant uncertainty exists as to the reimbursement status of newly approved healthcare products. Healthcare payers, including Medicare, are challenging the prices charged for medical products and services. Government and other healthcare payers increasingly attempt to contain healthcare costs by limiting both coverage and the level of reimbursement for drugs. Even if our product candidates are approved by the FDA, insurance coverage may not be available, and reimbursement levels may be inadequate, to cover our drugs. If government and other healthcare payers do not provide adequate coverage and reimbursement levels for any of our products, once approved, market acceptance of our products could be reduced.

We may be exposed to liability claims associated with the use of hazardous materials and chemicals.

Our research and development activities may involve the controlled use of hazardous materials and chemicals by our third-party service providers. Although we believe that our service providers maintain appropriate safety procedures for using, storing, handling and disposing of these materials in compliance with federal, state and local laws and regulations, we cannot completely eliminate the risk of accidental injury or contamination from these materials. In the event of such an accident, we could be held liable for any resulting damages and any liability could materially adversely affect our business, financial condition and results of operations. In addition, the federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of hazardous or radioactive materials and waste products may require us or our service providers to incur substantial compliance costs that could materially adversely affect our business, financial condition and results of operations. We do not carry insurance against liability resulting from the use of hazardous materials and chemicals. While we generally require our service providers to carry insurance against liability resulting from their use of such materials, we cannot be certain that such insurance will be sufficient to cover any related liability. To the extent our service providers fail to carry adequate levels of insurance, we could be exposed to liability claims associated with their use of hazardous materials and chemicals.

Risks Related to Our Intellectual Property

If we fail to protect or enforce our intellectual property rights adequately or secure rights to patents of others, the value of our intellectual property rights would diminish.

Our success, competitive position and future revenues will depend in part on our ability and the abilities of our licensors to obtain and maintain patent protection for our products, methods, processes and other technologies, to preserve our trade secrets, to prevent third parties from infringing on our proprietary rights and to operate without infringing upon the proprietary rights of third parties. Additionally, if any third-party manufacturer makes improvements in the manufacturing process for our products, we may not own, or may have to share, the intellectual property rights to the innovation.

To date, we hold certain exclusive rights under U.S. patents and patent applications as well as rights under foreign patent applications. We anticipate filing additional patent applications both in the U.S. and in other countries, as appropriate. However, we cannot predict:

the degree and range of protection any patents will afford us against competitors including whether third parties will find ways to invalidate or otherwise circumvent our patents;

·if and when patents will issue;

whether or not others will obtain patents claiming aspects similar to those covered by our patents and patent applications; or

whether we will need to initiate litigation or administrative proceedings which may be costly whether we win or lose.

If any of our know-how or other proprietary information is disclosed, the value of our know-how and other proprietary rights would be significantly impaired and our business and competitive position would suffer.

Our success also depends upon the skills, knowledge and experience of our scientific and technical personnel, our consultants and advisors as well as our licensors and contractors. To help protect our proprietary know-how and our inventions for which patents may be unobtainable or difficult to obtain, we rely on confidentiality agreements. To this end, we require all of our employees, consultants, advisors and contractors to enter into agreements which prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business. These agreements may not provide adequate protection for our know-how or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of such information. If any of our know-how or other proprietary information is disclosed, the value of our know-how and other proprietary rights would be significantly impaired and our business and competitive position would suffer.

If we infringe upon the rights of third parties we could be prevented from selling products, forced to pay damages, and defend against litigation.

If our products, methods, processes and other technologies infringe upon the proprietary rights of other parties, we could incur substantial costs and we may have to:

·obtain licenses, which may not be available on commercially reasonable terms, if at all;
·redesign our products or processes to avoid infringement;
·stop using the subject matter claimed in the patents held by others;
·pay damages; or
defend litigation or administrative proceedings which may be costly whether we win or lose, and which could result in a substantial diversion of our valuable management resources.

If requirements under our license agreements are not met, we could suffer significant harm, including losing rights to our products.

We depend on licensing agreements with third parties to maintain the intellectual property rights to our products under development. We have licensed rights from Invivis Pharmaceuticals, Inc. and The Ohio State University Research Foundation. These agreements require us and our licensors to perform certain obligations that affect our rights under these licensing agreements. All of these agreements last either throughout the life of the patents, or with respect to other licensed technology, for a number of years after the first commercial sale of the relevant product.

In addition, we are responsible for the cost of filing and prosecuting certain patent applications and maintaining certain issued patents licensed to us. If we do not meet our obligations under our license agreements in a timely manner, we could lose the rights to our proprietary technology.

Finally, we may be required to obtain licenses to patents or other proprietary rights of third parties in connection with the development and use of our products and technologies. Licenses required under any such patents or proprietary rights might not be made available on terms acceptable to us, if at all.

Risks Related to Our Securities

The exercise of our outstanding warrants could cause the market price of our common stock to fall, and may have significant dilution and other effects on our existing stockholders.

We issued warrants, or the 2012 Warrants and the 2013 Warrants, to certain holders to purchase an aggregate of approximately 42.6 million shares of our common stock. The exercise prices applicable to the 2012 Warrants and to some of the 2013 Warrants are subject to adjustment pursuant to certain anti-dilution provisions. The issuance by us of the shares of common stock issuable upon exercise of the 2012 and 2013 Warrants would significantly reduce the percentage ownership of our existing common stockholders and could, among other things, depress the price of the common stock. This result could significantly and adversely affect our ability to raise additional equity capital in the future.

The exercise of the 2012 Warrants could result in the issuance of up to approximately 16.8 million shares of common stock. Approximately 16.5 million of the 2012 Warrants are now exercisable at a price of \$2.40 per share. The exercise of the 2013 Warrants could result in the issuance of up to approximately 30.2 million shares of common stock. Approximately 4.5 million of the 2013 Warrants are initially exercisable at a price per share equal to \$0.01, approximately 12.9 million of the 2013 Warrants are exercisable at a price per share equal to \$4.00, and the remaining are exercisable at a price of \$2.40 per share.

The exercise prices of the 2012 Warrants and certain of the 2013 Warrants are subject to adjustment, however, in the event we sell or issue additional shares of our common stock (subject to certain exceptions) at a price per share less than the applicable conversion or exercise prices. If we make future issuances of common stock or rights to acquire common stock (subject to certain exceptions) at a per share price less than the applicable exercise prices of the 2012 Warrants and 2013 Warrants (other than those with an exercise price of \$0.01 per share), then the applicable exercise prices are subject to a weighted-average price adjustment.

We expect that we will need substantial additional capital in order to fund our operations during the applicable terms of the 2012 Warrants and the 2013 Warrants and that a likely source of such capital will be through the sale and issuance of additional shares of our common stock or securities convertible into our common stock. Consequently, if we make such future issuances at prices lower than the applicable 2012 Warrant or 2013 Warrant exercise prices, our stockholders could experience a significant dilution of their investment.

The holders of the 2012 Warrants and the 2013 Warrants may immediately sell the full amount of common stock received upon conversion or exercise of such instruments. As these shares are sold, the price of the common stock is likely to decrease, perhaps substantially, unless there is sufficient demand by purchasers of our common stock in the trading markets to meet the additional volume of shares of our common stock available from the exercise of the 2012 Warrants and the 2013 Warrants.

We cannot assure you that our common stock will ever be listed on NASDAQ or any other securities exchange.

Our common stock is currently eligible for trading on the OTCQB tier of the OTC Markets, an automated quotation system. Stocks traded on the OTCQB and other electronic over-the-counter markets are often less liquid than stocks traded on national securities exchanges. In fact, the historical trading of our common stock has been extremely limited and sporadic. We may seek listing on NASDAQ or the New York Stock Exchange in the future, but we cannot assure you that we will be able to meet the initial listing standards of either of those or any other stock exchange, or that we will be able to maintain a listing of our common stock on either of those or any other stock exchange. To the extent that our common stock is not traded on a national securities exchange, such as NASDAQ, the decreased liquidity of our common stock may make it more difficult to sell shares of our common stock at desirable times and at prices.

Our common stock is considered a "penny stock."

The SEC has adopted regulations which generally define a "penny stock" to be an equity security that has a market price of less than \$5.00 per share, subject to specific exemptions. Since trading of our common stock commenced, the market price has been below \$5.00 per share. Therefore, our common stock is deemed a "penny stock" according to SEC rules. This designation requires any broker or dealer selling these securities to disclose certain information concerning the transaction, obtain a written agreement from the purchaser and determine that the purchaser is reasonably suitable to purchase the securities. These rules may restrict the ability of brokers or dealers to sell shares of our common stock.

Because we did not become public through an underwritten initial public offering, we may not be able to attract the attention of major brokerage firms.

Additional risks may exist since we did not become public through an initial public offering underwritten by an investment bank. Security analysts of major brokerage firms may not provide coverage of us since there is no incentive to brokerage firms to recommend the purchase of our common stock. No assurance can be given that brokerage firms will want to conduct any secondary offerings on behalf of our company in the future. The lack of such analyst coverage may decrease the public demand for our common stock, making it more difficult for you to resell your shares when you deem appropriate.

Because we do not expect to pay dividends, you will not realize any income from an investment in our common stock unless and until you sell your shares at profit.

We have never paid dividends on our common stock and do not anticipate paying any dividends for the foreseeable future. You should not rely on an investment in our common stock if you require dividend income. Further, you will only realize income on an investment in our shares in the event you sell or otherwise dispose of your shares at a price higher than the price you paid for your shares. Such a gain would result only from an increase in the market price of our common stock, which is uncertain and unpredictable.

There may be issuances of shares of "blank check" preferred stock in the future.

Our amended and restated certificate of incorporation authorizes the issuance of up to 35,000,000 shares of preferred stock, none of which are issued or currently outstanding. Our board of directors has the authority to fix and determine the relative rights and preferences of up to 35,000,000 preferred shares, as well as the authority to issue such shares, without further stockholder approval. As a result, our board of directors could authorize the issuance of a series of preferred stock that is senior to our common stock and that would grant to holders preferred rights to our assets upon liquidation, the right to receive dividends, additional registration rights, anti-dilution protection, the right to the redemption to such shares, together with other rights, none of which will be afforded holders of our common stock.

If we obtain an analyst following, and if our results do not meet such analysts' forecasts and expectations, our stock price could decline.

We do not believe that any securities analysts cover us. The lack of analyst coverage of our business and operations may decrease the public demand for our common stock, making it more difficult for you to resell your shares when you deem appropriate. To the extent we obtain an analyst following in the future, such analysts may provide valuations regarding our stock price and make recommendations whether to buy, hold or sell our stock. Our stock price may be dependent upon such valuations and recommendations. Analysts' valuations and recommendations are based primarily on our reported results and their forecasts and expectations concerning our future results regarding, for example, expenses, revenues, clinical trials, regulatory marketing approvals and competition. Our future results are subject to substantial uncertainty, and we may fail to meet or exceed analysts' forecasts and expectations as a result of a number of factors, including those discussed above under the sections "Risks Related to Our Business" and "Risks Related to the Clinical Testing, Regulatory Approval, Manufacturing and Commercialization of Our Product Candidates." If our results do not meet analysts' forecasts and expectations, our stock price could decline as a result of analysts lowering their valuations and recommendations or otherwise.

We are at risk of securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology companies have experienced greater than average stock price volatility in recent years. If we faced such litigation, it could result in substantial costs and a diversion of our management's attention and resources, which could harm our business.

NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains "forward-looking statements." The forward-looking statements are only predictions and provide our current expectations or forecasts of future events and financial performance and may be identified by the use of forward-looking terminology, including the terms "believes," "estimates," "anticipates," "expects," "plans," "intends," "will" or "should" or, in each case, their negative, or other variations or comparable terminology, though the absence of these words does not necessarily mean that a statement is not forward-looking. Forward-looking statements include all matters that are not historical facts and include, without limitation, statements concerning our business strategy, outlook, objectives, future milestones, plans, intentions, goals, future financial conditions, our research and development programs and planning for and timing of any clinical trials, the possibility, timing and outcome of submitting regulatory filings for our product candidates under development, research and development of particular drug products, the development of financial, clinical, manufacturing and marketing plans related to the potential approval and commercialization of our drug products, and the period of time for which our existing resources will enable us to fund our operations.

Forward-looking statements are subject to many risks and uncertainties that could cause our actual results to differ materially from any future results expressed or implied by the forward-looking statements. Examples of the risks and uncertainties include, but are not limited to:

the risk that recurring losses, negative cash flows and the inability to raise additional capital could threaten our ability to continue as a going concern;

the risk that we may not successfully develop and market our product candidates, and even if we do, we may not become profitable;

·risks relating to the progress of our research and development;

risks relating to significant, time-consuming and costly research and development efforts, including pre-clinical studies, clinical trials and testing, and the risk that clinical trials of our product candidates may be delayed, halted or fail;

risks relating to the rigorous regulatory approval process required for any products that we may develop independently, with our development partners or in connection with any collaboration arrangements;

the risk that changes in the national or international political and regulatory environment may make it more difficult to gain FDA or other regulatory approval of our drug product candidates;

·risks that the FDA or other regulatory authorities may not accept any applications we file;

risks that the FDA or other regulatory authorities may withhold or delay consideration of any applications that we file or limit such applications to particular indications or apply other label limitations;

risks that, after acceptance and review of applications that we file, the FDA or other regulatory authorities will not approve the marketing and sale of our drug product candidates;

risks relating to our drug manufacturing operations, including those of our third-party suppliers and contract manufacturers;

risks relating to the ability of our development partners and third-party suppliers of materials, drug substance and related components to provide us with adequate supplies and expertise to support manufacture of drug product for initiation and completion of our clinical studies;

risks relating to the transfer of our manufacturing technology to third-party contract manufacturers; and

· other risks and uncertainties detailed in "Risk Factors."

Pharmaceutical and biotechnology companies have suffered significant setbacks in advanced clinical trials, even after obtaining promising earlier trial results. Data obtained from such clinical trials are susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. Except to the extent required by applicable laws or rules, we do not undertake to update any forward-looking statements or to publicly announce revisions to any of our forward-looking statements, whether resulting from new information, future events or otherwise.

DESCRIPTION OF 2013 OFFERING

General

On October 29, 2013, we entered into a Securities Purchase Agreement with certain purchasers identified therein pursuant to which we agreed to sell, and the purchasers agreed to purchase, an aggregate of 12,868,585 units of the Company's securities, which we refer to as the Units, each Unit consisting of the following:

either (a) one share of common stock, or (b) a five-year common stock warrant to purchase one share of common stock at an exercise price of \$0.01 per share, referred to as the Series C Warrants;

- a five-year warrant to purchase one share of common stock at an exercise price of \$4.00 per share, referred to as the Series D Warrants; and
- a warrant, expiring on October 31, 2014, to purchase one share of common stock at an exercise price of \$2.40 per share, referred to as the Series E Warrants.

We sold and issued 8,413,354 Units consisting of shares of common stock, Series D Warrants and Series E Warrants at a purchase price of \$2.40 per Unit, and 4,455,231 Units consisting of Series C Warrants, Series D Warrants and Series E Warrants at a purchase price of \$2.39 per Unit, for total gross proceeds to us of \$30.84 million, before

deducting fees and other transaction related expenses of approximately \$750,000. A closing of the sale of 12,826,752 Units was completed on October 29, 2013, and the sale of the remaining 41,833 Units was completed on October 30, 2013. These transactions are collectively referred to as the 2013 Offering.

The purchase agreement contains customary representations, warranties and covenants by each of us and the purchasers. In addition, the purchase agreement provides that each purchaser has a right, subject to certain exceptions described in the agreement, to participate in future issuances of equity and debt securities by us for a period of 18 months following the effective date of the registration statement covering the resale of the warrant shares.

Description of the 2013 Warrants

The following description is qualified in its entirety by the terms and conditions of the Series C Warrants, Series D Warrants and Series E Warrants, collectively referred to as the 2013 Warrants, the form of which is incorporated by reference into the registration statement of which this prospectus forms a part. The following description may not contain all the information with respect to the 2013 Warrants that is important to you. We encourage you to read each form of 2013 Warrant in its entirety.

Under the terms of the purchase agreement, each purchaser had the option to elect to receive a Series C Warrant in lieu of a share of common stock in connection with each Unit it purchased. The Series C Warrants have a five-year term and are exercisable at a price of \$0.01 per share. The Series D Warrants are exercisable for a period of 5 years from the issuance date at an initial exercise price of \$4.00 per share, subject to adjustment for stock splits, combinations, recapitalization events and certain dilutive issuances (as described below). The Series E Warrants are exercisable until October 31, 2014 at an initial exercise price of \$2.40 per share, subject to adjustment for stock splits, combinations, recapitalization events and certain dilutive issuances (as described below). The applicable exercise price of the Series D Warrants and Series E Warrants (but not the Series C Warrants) is subject to a weighted-average price adjustment in the event we make future issuances of common stock or rights to acquire common stock (subject to certain exceptions) at a per share price less than the applicable warrant exercise price. The Series D Warrants may be redeemed by us at a price of \$0.01 per warrant share if, in addition to certain other conditions specified in such warrants, for a period of 10 consecutive trading days following the effective date of a Securities Act registration statement covering the resale of the warrant shares, the volume-weighted average price is at least \$12.00 and the average daily trading volume of the common stock is at least 100,000 shares on each day during such 10-day period (in each case, subject to adjustment for stock splits, combinations and similar recapitalization events).

The 2013 Warrants are required to be exercised for cash, provided that if during the term of the 2013 Warrants there is not an effective registration statement under the Securities Act covering the resale of the shares issuable upon exercise of the 2013 Warrants, then the 2013 Warrants may be exercised on a cashless (net exercise) basis.

Registration Rights Agreement

The following description is qualified in its entirety by the terms and conditions set forth in the registration rights agreement with respect to the 2013 Offering incorporated by reference to the registration statement that contains this prospectus hereto, which we refer to as the Registration Rights Agreement. The following description may not contain all the information with respect to such registration rights important to you. We encourage you to read the Registration Rights Agreement.

In connection with the entry into the purchase agreement, and as contemplated thereby, on October 29, 2013, we entered into a Registration Rights Agreement with the purchasers. Pursuant to the terms of the Registration Rights Agreement, we agreed to file, on or before December 30, 2013, a registration statement under the Securities Act covering the resale of the shares of common stock issued as part of the Units and the shares of common stock issuable upon exercise of the 2013 Warrants, and to cause such registration statement to be declared effective by the Commission as soon as practicable thereafter, but not later than 120 days following the date of the Registration Rights Agreement. If we do not file the registration statement by December 30, 2013 or obtain its effectiveness by the 120 days following the date of the Registration Rights Agreement, then we are required to pay liquidated damages to the purchasers in an amount equal to 1% of the aggregate purchase price paid by such purchaser for the Units per month until the registration statement is filed or declared effective, as applicable, subject to a maximum of 10% of the aggregate purchase price paid by each purchaser for the units. We are required to maintain the effectiveness of the registration statement until all of the shares covered thereby are sold or may be sold pursuant to Rule 144 under the Securities Act without volume or manner-of-sale restrictions and without the requirement that we be in compliance with the current public information requirements of Rule 144.

USE OF PROCEEDS

We will receive none of the proceeds from the sale of the shares by the selling stockholders, except for the warrant exercise price upon exercise of the warrants, which would be used for working capital and other general corporate purposes.

SELLING STOCKHOLDERS

This prospectus covers the resale by the selling stockholders identified below of 38,671,405 shares of our common stock, of which 30,258,051 shares are issuable upon the exercise of outstanding Series C Warrants, Series D Warrants, Series E Warrants and a warrant issued as compensation for placement agent services in connection with the 2013 offering.

The following table sets forth the number of shares of our common stock beneficially owned by the selling stockholders as of January 27, 2014, and after giving effect to this offering, except as otherwise referenced below.

Selling Stockholder	Shares beneficially owned before offering (1)	Number of outstanding shares offered by selling stockholder	Number of shares offered by selling stockholder upon exercise of warrants	Beneficial ownership after offering (1) Number of shares	Percent
Abel G. Halpern (2)	286,965	41,666	83,332	161,967	*
Alan T. Yuasa as Trustee of the Michael J. Shimoko	96,415	10,000	20,000	66,415	*
Trust (3)	90,413	10,000	20,000	00,413	•
Alexander A. Zukiwski (4)	555,967	41,666	83,332	430,969	*
Anesta Management Limited (5)	62,502	20,834	41,668	-	*
Aspiration Growth Opportunities, LP (6)	62,499	20,833	41,666	-	*
Arie and Rebecka Belldegrun as Trustees of the Belldegrun Family Trust dated February 18, 1994 (7)	3,414,577	187,500	375,000	1,977,082	3.8
Auriga Global Investors SV, SA (8)(9)	1,285,137	25,000	50,000	1,210,137	2.4
Benjamin Domb (10)	572,700	83,333	166,666	322,701	*
Bonderman Family Limited Partnership (9) (11)	3,750,000	1,250,000	2,500,000	-	*
Brio Capital Master Fund Ltd. (9)(12)	1,022,880	125,000	250,000	647,880	1.3
Commercial Street Capital LLC (13)	4,493,943	687,500	1,375,000	2,431,443	4.7
Daniel Mendelow	49,998	16,666	33,332	-	*
David Rosenberg	30,000	10,000	20,000	-	*
Deefield Special Situations International Master Fund, L.P. (16)	281,874	93,958	187,916	-	*
Deefield Special Situations Fund, L.P. (16)	343,125	114,375	228,750	_	*
F. Mitchell Howell	60,000	20,000	40,000	_	*
Fidaco Investments, C.V. (18)	187,500	62,500	125,000	-	*
Frost Gamma Investments Trust (19)	2,062,500	687,500	1,375,000	_	*
Gerald Lieberman (20)	76,265	10,416	20,832	45,017	*

Glenn R. Mattes (21)	444,736	20,833	41,666	382,237	*
Green Fields Offshore Inc. (9) (22)	2,582,115	-	2,259,414	322,701	*
IVC Investors, LLLP (23)	312,501	104,167	208,334	-	*
Prine Intervest Limited (23)	312,501	104,167	208,334	_	*
Henry Rothman (24)	88,431	12,500	25,000	50,931	*
HSU Gamma Investment LP (25)	300,000	100,000	200,000	_	*
Irvin R. Kessler (26)	303,360	41,667	83,334	178,359	*
Juan F. Rodriguez	12,501	4,167	8,334	-	*
Jeffrey E. Donfeld, a Professional Corporation, 401(k)	300,462	20,833	41,666	175,464	*
Profit Sharing Plan (28)	·			173,404	
Kate Inman	12,501	4,167	8,334	-	*
Leumi Overseas Trust Corporation Limited as Trustee	3,414,577	104,166	208,332	1,977,082	3.8
of the BTL Trust (7)	2,121,21	,		-,-,-,	
Leumi Overseas Trust Corporation Limited as Trustee	3,414,577	104,166	208,332	1,977,082	3.8
of the Tampere Trust (7)				, ,	
Lillian Tauber	37,500	12,500	25,000	-	*
Lorber Alpha II LP (31)	252,000	84,000	168,000	-	*
Adam Malamed	63,000	21,000	42,000	-	*
Mara Schainuck	62,100	20,700	41,400	-	*
Marie V. Wolf	31,251	10,417	20,834	-	*
Marlin Capital Investments, LLC (35)	249,999	83,333	166,666	-	*
Maxim Partners LLC (36)	356,900	-	65,650	291,250	*
MDRB Partnership, L.P. (7)	3,414,577	83,333	166,666	1,977,082	3.8
Michael Leibowitz	63,000	21,000	42,000	-	*
Michael Novak	75,000	25,000	50,000	-	*
MZ Trading LLC (38)	63,000	21,000	42,000	-	*
Olyrca Limited Partnership (39)	187,500	62,500	125,000	-	*
OPKO Health, Inc. (9)(40)	2,499,999	833,333	1,666,666	-	*
Otro Mas, LLC (41)	31,248	10,416	20,832	-	*
Perceptive Life Sciences Master Fund Ltd. (9) (42)	11,110,083	527,500	5,742,029	4,840,554	9.0
Peter Kash and Donna Kash (JTWROS) (9)(43)	569,195	10,416	20,832	537,947	1.1
Richard Pfenninger Jr.	63,000	21,000	42,000	-	*
Robert Prego Pineda	125,001	41,667	83,334	-	*
Pontifax (Cayman) II L.P. (46)	3,417,613	203,682	407,364	2,167,615	4.2
Pontifax (Israel) II - Individual Investors L.P. (46)	3,417,613	59,558	119,116	2,167,615	4.2
Pontifax (Israel) II L.P. (46)	3,417,613	153,426	306,852	2,167,615	4.2
Quantum Partners LP (9)(47)	12,770,676	369,165	7,157,580	5,243,931	9.7
Rachel Family Partnership LP (48)	77,295	10,416	20,832	46,047	*
Rafay H. Faroouqi	124,998	41,666	83,332	-	*
Richard Lampen	63,000	21,000	42,000	-	*
Richard Rosenstock	31,248	10,416	20,832	-	*
The Robert F. Johnston Living Trust(52)	249,999	83,333	166,666	-	*
FHC Stock Holdings, LLC (53)	937,500	312,500	625,000	-	*
Sabby Healthcare Volatility Master Fund, Ltd. (9)(54)	4,250,124	312,500	625,000	3,000,126	5.7
Sabby Volatility Warrant Master Fund, Ltd. (9)(54)	4,250,124	104,166	208,332	3,000,126	5.7
Jacqueline Simkin Revocable Trust, as amended and				, ,	
restated December 16, 2003 (55)	249,999	83,333	166,666	-	*
Steven D. Rubin (56)	63,000	21,000	42,000	-	*
Primafides (Suisse) SA as Trustees of Sirius Trust (57)	290,171	41,666	83,332	165,173	*
Talpion Equity Partners Master Fund LP (58)	1,250,001	416,667	833,334	-	*
David Thalheim Revocable Living Trust (59)	12,498	4,166	8,332	-	*

The Donfeld Living Trust, dated February 3, 1983, as	300,462	20.833	41.666	175.464	*
amended (28)	300,402	20,633	41,000	173,404	
Subbarao Uppaluri	63,000	21,000	42,000	-	*
Uzi Zucker (61)	466,744	83,333	166,666	216,745	*
William F. Hamilton (62)	72,547	20,833	41,666	10,048	*
TOTALS		8,413,354	30,258,051		

* denotes less than 1%

Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act, and includes any shares as to which the security or stockholder has sole or shared voting power or investment power, and also any shares which the security or stockholder has the right to acquire within 60 days of the date hereof, whether

- through the exercise or conversion of any stock option, convertible security, warrant or other right. The indication herein that shares are beneficially owned is not an admission on the part of the security or stockholder that he, she or it is a direct or indirect beneficial owner of those shares. Percentage of shares beneficially owned after the resale of all the shares offered by this prospectus assumes there are outstanding 50,563,311 shares of common stock, including all shares offered hereby that are issuable upon exercise of warrants.
- In addition to the shares offered hereby, beneficial ownership also includes 50,858 shares of our common stock, (2)69,443 shares issuable upon the exercise of Series A Warrants and 41,666 shares issuable upon the exercise of Series B Warrants.
 - In addition to the shares offered hereby, beneficial ownership also includes 27,832 shares of our common stock,
- (3)20,833 shares issuable upon the exercise of Series A Warrants, 12,500 shares issuable upon the exercise of Series B Warrants and 5,250 shares issuable upon the exercise of other warrants.
 - Dr. Zukiwski is our Vice President, Chief Medical Officer. In addition to the shares offered hereby, beneficial
- ownership also includes 75,360 shares of our common stock, 104,166 shares issuable upon the exercise of Series A Warrants, 62,500 shares issuable upon the exercise of Series B Warrants, and 188,943 shares issuable upon the exercise of options.
- (5) Jeanette Gelman holds voting and/or dispositive power over the shares held by the selling stockholder.
- (6) Joseph Sandberg holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes: (i) 3,115 shares of our common stock and 262,660 shares issuable upon the exercise of stock options held by Arie Belldegrun, M.D.; (ii) 191,794 shares of our common stock, 243,055 shares issuable upon the exercise of Series A Warrants, 145,833 shares issuable upon the exercise of Series B Warrants, and 6,562 shares issuable upon the exercise of other warrants held by Arie and Rebecka Belldegrun as Trustees of the Belldegrun Family Trust dated February 18, 1994; (iii) 39,643 shares of our common stock and 13,125 shares issuable upon the exercise of warrants held by Leumi Overseas Trust Corporation Limited ("Leumi") as Trustee of the BTL Trust; (iv) 150,721 shares of our common stock, 208,333 shares issuable upon the exercise of Series A Warrants, and 125,000 shares issuable upon the exercise of Series B Warrants held by Leumi as Trustee of the Tampere Trust; (v) 100,481 shares of our common stock, 138,888
- (7) shares issuable upon the exercise of Series A Warrants and 83,333 shares issuable upon the exercise of Series B Warrants held by the Arie S. Belldegrun M.D. Inc. Profit Sharing Plan; and (vi) 91,312 shares of our common stock, 104,166 shares issuable upon the exercise of Series A Warrants, 62,500 shares issuable upon the exercise of Series B Warrants, and 6,562 shares issuable upon the exercise of other warrants held by MDRB Partnership, L.P. ("MDRB"). Dr. Belldegrun, who serves as Chairman of our Board of Directors, is a beneficiary of each of the BTL Trust and the Tampere Trust and is the managing partner of MDRB. Dr. Belldegrun holds voting and/or dispositive power over the shares held by MDRB and the Arie S. Belldegrun M.D. Inc. Profit Sharing Plan. Richard J. Guillaume and Christopher R.P. Lees, directors of Leumi Overseas Trust Corporation Limited ("Leumi"), hold voting and/or dispositive power over the shares held by Leumi as trustee of each of the BTL Trust and the Tampere Trust.
- Dr. Raj Mehra holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes 376,804 shares of our common stock, 520,833 shares issuable upon the exercise of Series A Warrants, and 312,500 shares issuable upon the exercise of Series B Warrants held by Auriga Investors – Montserrat Global Fund.

Notwithstanding the number of shares of our common stock shown as beneficially owned by the selling stockholder in the table above, the Series A Warrants, Series B Warrants, or 2013 Warrants held by the selling (9) stockholder provide that the selling stockholder may not exercise such Series A Warrants, Series B Warrants, or 2013 Warrants to the extent that the selling stockholder would beneficially own in excess of 9.99% of our outstanding common stock immediately after giving effect to such exercise.

- In addition to the shares offered hereby, beneficial ownership also includes 100,480 shares of our common stock, 138,888 shares issuable upon the exercise of Series A Warrants, and 83,333 shares issuable upon the exercise of Series B Warrants.
- Wildcat Capital Management, LLC ("WCM") serves as investment advisor to the Bonderman Family
 (11) Limited Partnership ("BFLP") and, as such, has investment discretion over the shares held by
 BFLP. Leonard Potter is President and Chief Investment Officer of WCM.
 - Shaye Hirsch holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes 203,438
- shares of our common stock, 277,776 shares issuable upon the exercise of Series A Warrants, and 166,666 shares issuable upon the exercise of Series B Warrants.

 Steven Ruchefsky, President of Commercial Street Capital, LLC, is a director of Arno and holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes (i) 908,772 shares of our common stock,
- (13) 868,055 shares issuable upon the exercise of Series A Warrants, 520,833 shares issuable upon the exercise of Series B Warrants, and 115,500 shares issuable upon the exercise of other warrants held by Commercial Street Capital, LLC, and (ii) 18,283 shares of our common stock issuable upon the exercise of options and warrants held by Mr. Ruchefsky.

 Deerfield Capital, L.P. is the general partner of Deerfield Special Situations Fund, L.P. Deerfield
 - Management Company, L.P. is the investment manager of Deerfield Special Situations Fund, L.P. Deerfield Management Company, L.P. is the investment manager of Deerfield Special Situations Fund
- (16) International Limited. James E. Flynn, managing member of Deerfield Capital, L.P. and Deerfield Management Company, L.P., holds voting and dispositive power over the shares held by the selling stockholders.
- (18) Leslie Alan Rozencwaig, Esq., as attorney-in-fact of the General Partner, holds voting and/or dispositive power over the shares held by the selling stockholder.
- (19) Phillip Frost holds voting and/or investment power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes 17,241 shares of our
- (20) common stock, 17,360 shares issuable upon the exercise of Series A Warrants, and 10,416 shares issuable upon the exercise of Series B Warrants.
 - Mr. Mattes is our President and Chief Executive Officer and a member of our board of directors. In addition to the shares offered hereby, beneficial ownership also includes 56,370 shares of our
- (21) common stock, 34,721 shares issuable upon the exercise of Series A Warrants, 20,833 shares issuable upon the exercise of Series B Warrants, and 270,313 shares issuable upon the exercise of options.
 Anton Linderum holds voting and/or dispositive power over the shares held by the selling
- stockholder. In addition to the shares offered hereby, beneficial ownership also includes 100,480 shares of our common stock, 138,888 shares issuable upon the exercise of Series A Warrants, and 83,333 shares issuable upon the exercise of Series B Warrants.
- (23) Glenn L. Halpryn holds voting and/or dispositive power over the shares held by the selling stockholder.
 - In addition to the shares offered hereby, includes 20,833 shares issuable upon the exercise of Series
- (24) A Warrants and 12,500 shares issuable upon the exercise of Series B Warrants held by the selling stockholder.
- Jane Hsiao holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes 67,026 shares of our
- (26) common stock, 69,583 shares issuable upon the exercise of Series A Warrants and 41,750 shares issuable upon the exercise of Series B Warrants.
- Jeffrey E. Donfeld holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes: (i) 24,178

shares of our common stock, 34,721 shares issuable upon the exercise of Series A Warrants, and 28,833 shares issuable upon the exercise of Series B Warrants held by Jeffrey E. Donfeld, a Professional Corporation, 401(k) Profit Sharing Plan; and (ii) 24,178 shares of our common stock, 34,721 shares issuable upon the exercise of Series A Warrants, and 28,833 shares issuable upon the exercise of Series B Warrants held by The Donfeld Living Trust, dated February 3, 1983, as amended.

- (31) Howard M. Lorber holds voting and/or dispositive power over the shares held by the selling stockholder.
- (35) Michael Brauser, manager of the selling stockholder, holds voting and/or dispositive power over the shares held by the selling stockholder.

 Michael Rabinowitz holds voting and/or dispositive power over the shares held by the selling
- stockholder. In addition to the shares offered hereby, beneficial ownership also includes 283,750 shares issuable upon the exercise of 2012 Placement Agent warrants and 7,500 shares of common stock.
- (38) Mark Zeitchick holds voting and/or dispositive power over the shares held by the selling stockholder.
- (39) Leslie Alan Rozencwaig, Esq., as attorney-in-fact of the General Partner, holds voting and/or dispositive power over the shares held by the selling stockholder.

 Pursuant to an agreement with us deted October 20, 2013, and in connection with its investment.

Pursuant to an agreement with us dated October 29, 2013, and in connection with its investment in the 2013 Offering, OPKO Health, Inc. has the right to designate one person as a non-voting observer to our board of directors and has a right of first negotiation with respect to certain strategic

- transactions that we may wish to pursue, in each case for as long as OPKO Health continues to hold at least 3% of our outstanding common stock determined on a fully-diluted basis. See "Prospectus Summary Recent Developments Agreement with OPKO Health, Inc."
- (41) Leslie Alan Rozencwaig, Manager, holds voting and/or dispositive power over the shares held by the selling stockholder.

 Joseph Edelman holds voting and/or dispositive power over the shares held by the selling
- stockholder. In addition to the shares offered hereby, beneficial ownership also includes 1,507,221 shares of our common stock, 2,083,333 shares issuable upon the exercise of Series A Warrants and 1,250,000 shares issuable upon the exercise of Series B Warrants.

In addition to the shares offered hereby, beneficial ownership also includes: (i) 103,194 shares of our common stock, 125,000 shares issuable upon the exercise of Series A Warrants, 75,000 shares issuable upon the exercise of Series B Warrants, and 5,250 shares issuable upon the exercise of other

(43) warrants held by Dr. and Mrs. Kash (JTWROS); (ii) 165,953 shares of our common stock and 18,691 shares issuable upon the exercise of options and warrants held by Dr. Kash; and (iii) 44,859 shares of our common stock held by Mrs. Kash as custodian for the benefit of their minor children under the UGMA.

- Tomer Kariv and Ran Nussbaum hold voting and/or dispositive power over the shares held by the selling stockholder. Mr. Kariv is a director of Arno. In addition to the shares offered hereby, beneficial ownership also includes: (i) 435,777 shares of our common stock, 339,470 shares issuable upon the exercise of Series A Warrants, 203,682 shares issuable upon the exercise of Series B Warrants and 76,991 shares issuable upon the exercise of other warrants held by Pontifax (Cayman) II L.P., (ii) 127,424 shares of our common stock, 99,263
- (46) shares issuable upon the exercise of Series A Warrants, 59,558 shares issuable upon the exercise of Series B Warrants, and 22,513 shares issuable upon the exercise of other warrants held by Pontifax (Israel) II - Individual Investors L.P., (iii) 328,254 shares of our common stock, 255,710 shares issuable upon the exercise of Series A Warrants, 153,426 shares issuable upon the exercise of Series B Warrants, and 57,995 shares issuable upon the exercise of other warrants held by Pontifax (Israel) II L.P., and (iv) 7,552 shares of our common stock issuable upon the exercise of options held by Mr. Kariv.
 - Soros Fund Management LLC ("SFM") serves as principal investment manager to Quantum Partners LP. As such, SFM has been granted investment discretion over portfolio investments, including the shares reported in the table
- above, held for the account of Quantum Partners LP. George Soros serves as Chairman of SFM and Robert Soros serves as President and Deputy Chairman of SFM. In addition to the shares offered hereby, beneficial ownership also includes 1,632,822 shares of our common stock, 2,256,943 shares issuable upon the exercise of Series A Warrants and 1,354,166 shares issuable upon the exercise of Series B Warrants.
- Ruki Renov holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes 18,271 shares of our common stock, 17,360 shares
- issuable upon the exercise of Series A Warrants and 10,416 shares issuable upon the exercise of Series B Warrants.
- (52) Robert Johnston holds voting and/or dispositive power over the shares held by the selling stockholder.
- (53) Ronald Dozoretz holds voting and/or dispositive power over the shares held by the selling stockholder. Each of Sabby Healthcare Volatility Master Fund, Ltd. and Sabby Volatility Warrant Master Fund, Ltd. (collectively, the "Sabby Funds") has indicated to us that Hal Mintz has voting and investment power over the shares held by it. Each of the Sabby Funds has also indicated to us that Sabby Management, LLC serves as its investment manager, that Hal Mintz is the manager of Sabby Management, LLC and that each of Sabby Management, LLC and Hal Mintz disclaim beneficial ownership over these shares except to the extent of any
- (54) pecuniary interest therein. In addition to the shares offered hereby, beneficial ownership also includes: (i) with respect to Sabby Healthcare Volatility Master Fund, Ltd., 495,134 shares of our common stock, 868,055 shares issuable upon the exercise of Series A Warrants, and 520,833 shares issuable upon the exercise of Series B Warrants; and (ii) with respect to Sabby Volatility Warrant Master Fund, Ltd., 282,771 shares of our common stock, 520,833 shares issuable upon the exercise of Series A Warrants, and 312,500 shares issuable upon the exercise of Series B Warrants.
- (55) Jacqueline Simkin holds voting and/or dispositive power over the shares held by the selling stockholder.
- Pursuant to an October 29, 2013 agreement with us and OPKO Health, Inc., Steven D. Rubin has been designated by OPKO Health as a non-voting observer to our board of directors. Ari Tatos, Magali Garcia-Baudin, Philip Dean, Philippe De Salis and Bonnie Steiner are directors of Primafides (Suisse) SA, the trustee of the Sirius Trust, and share voting and/or dispositive power over the shares held by the
- (57) selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes 104,369 shares of our common stock, 34,721 shares issuable upon the conversion of Series A Warrants, 20,833 shares issuable upon the conversion of Series B Warrants, and 5,250 shares issuable upon the exercise of other warrants.
- (58) Henry Swieca holds voting and/or dispositive power over the shares held by the selling stockholder.
- (59) David Thalheim holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership also includes 86,886 shares of our common stock,
- (61)69,443 shares issuable upon the conversion of Series A Warrants, 41,666 shares issuable upon the conversion of Series B Warrants, and 18,750 shares issuable upon the exercise of other warrants.

(62)

In addition to the shares offered hereby, beneficial ownership also includes 1,246 shares of our common stock and 8,802 shares issuable upon the exercise of stock options. Dr. Hamilton is a member of our board of directors.

ADDITIONAL DISCLOSURE REGARDING TRANSACTIONS

BETWEEN THE COMPANY AND THE SELLING STOCKHOLDERS

Payments in connection with 2013 Offering

The following table summarizes the total payments and potential payments to the selling stockholders and their affiliates in connection with our 2013 Offering.

	mounts paid as of nuary 27, 2014	otential Future ayment Obligations	Total
Placement Fees (1)	\$ 636,000	-	\$636,000
Placement Warrants (2)	69,589	-	69,589
Potential Liquidated Damages for Delayed Registration (3)	\$ -	\$ 3,084,005	\$3,084,005
Legal Fees (4)	4,000	-	4,000
Total payments and potential payments	\$ 709,589	\$ 3,084,005	\$3,793,594

- We engaged Maxim Group, LLC as placement agent in connection with our 2012 offering of warrants and debentures. Pursuant to certain "fee tail" provisions under our 2012 agreement with Maxim Group, LLC relating to the 2012 offering, we paid Maxim a cash fee of \$636,000 upon the closing of our
 - 2013 offering. In addition to the cash fee described in footnote (1), we also issued five-year warrants to purchase 65,650 shares of common stock at an initial exercise price of \$2.64 per share (the "Maxim Warrants") to
- Maxim Partners, LLC. We have engaged the services of a third-party valuation consultant to determine the value of the Maxim Warrants. Using a Monte Carlo simulation model, the third-party valuation consultant estimated the value of the Maxim Warrants to be approximately \$1.06 per shares as of October 29, 2013.
- (3) Under the Registration Rights Agreement, we agreed to file, on or before December 30, 2013, a registration statement under the Securities Act covering the resale of the shares of common stock issued as part of the Units and the shares of common stock issuable upon exercise of the 2013 Warrants, and to cause such registration statement to be declared effective by the Commission as soon as practicable thereafter, but not later than 120 days following the date of the Registration Rights Agreement. If we do not obtain effectiveness of the registration statement by 120 days following the date of the Registration Rights Agreement, then we are required to pay liquidated damages to the purchasers in an amount equal to 1% of the aggregate purchase price paid by such purchaser for the Units per month until the registration statement is declared effective, subject to a maximum of 10% of the aggregate purchase price paid by each purchaser for the units. We are required to maintain the effectiveness of the registration statement until all of the shares covered thereby are sold or may be sold pursuant to Rule 144 under the Securities Act without volume or manner-of-sale restrictions and

without the requirement that we be in compliance with the current public information requirements of Rule 144.

We paid one of the investors in the 2013 Offering the amount of \$4,000 as reimbursement of legal (4) fees incurred in connection with negotiating the Conversion Agreement relating to the conversion of the 2012 Debentures.

Potential Selling Stockholder Profit

The following tables summarize the potential profit the selling stockholders could realize as a result of the conversion discount for the shares underlying the Series C Warrants, the Series E Warrants and the Placement Warrants. The 2012 Series B Warrants and the warrants issued to the placement agent in connection with the 2012 offering also provide for a conversion discount. No other securities held by the selling stockholders or their affiliates provide for any conversion discount.

Potential Profit Underlying Series C Warrants

Market price per share of common stock on October 28, 2013 (1)	\$2.76
Exercise price per share Price paid per Unit containing Series C Warrants Effective exercise price per share	\$0.01 \$2.39 \$2.40
Total shares underlying Warrants	4,455,231
Aggregate market price of shares underlying Warrants Aggregate effective exercise price of shares underlying Warrants Total discount to market price of shares underlying Warrants	\$12,296,438 \$10,692,554 \$1,603,884

⁽¹⁾ Represents the average of the high and low prices of our common stock as reported on the OTCQB on October 28, 2013, the most recent date on which shares of our common stock were traded prior to our 2013 Offering.

Potential Profit Underlying Series E Warrants

Market price per share of common stock on October 28, 2013 (1)	\$2.76
Exercise price per share	\$2.40
Total shares underlying Warrants	12,868,585
Aggregate market price of shares underlying Warrants Aggregate exercise price of shares underlying Warrants	\$35,517,295 \$30,884,604

\$4,632,691

Potential Profit Underlying Placement Warrants

Total discount to market price of shares underlying Warrants

Market price per share of common stock on October 28, 2013 (1)	\$2.76
Exercise price per share	\$2.64
Total shares underlying Warrants	65,650
Aggregate market price of shares underlying Warrants Aggregate exercise price of shares underlying Warrants Total discount to market price of shares underlying Warrants	\$181,194 \$173,316 \$7,878

Comparison of Issuer Proceeds to Potential Selling Stockholder Profit.

The following table provides a comparison of the gross proceeds to the Company from the 2013 Offering to: (i) the total payments and potential payments to the selling stockholders and their affiliates (summarized above under

⁽¹⁾ Represents the average of the high and low prices of our common stock as reported on the OTCQB on October 28, 2013, the most recent date on which shares of our common stock were traded prior to our 2013 Offering.

⁽¹⁾ Represents the average of the high and low prices of our common stock as reported on the OTCQB on October 28, 2013, the most recent date on which shares of our common stock were traded prior to our 2013 Offering.

"—Payments in connection with the 2013 Offering"); (ii) the resulting net proceeds to the Company; and (iii) the combined potential profit the selling stockholders could realize as a result of the conversion discount for the shares underlying the 2013 Series C Warrants, the 2013 Series E Warrants and the Placement Warrants (summarized above under "—Potential Selling Stockholder Profit").

Gross Company Proceeds from 2013 Offering	\$30,840,050)		
Payments and Potential Payments to Selling Stockholders	\$3,793,594			
Net Company Proceeds from 2013 Offering	\$27,046,456)		
Potential Selling Stockholder Profit	\$6,236,573			
Payments and Potential Payments to Selling Stockholders and Potential Selling Stockholder Profit as a	13.2	%		
Percentage of Net Company Proceeds from 2013 Offering				

Prior Transactions between the Company and the Selling Stockholders.

The following table summarizes the prior securities transactions between the Company and the selling stockholders and their affiliates.

Selling Stockholder	Date of Transaction	Total Number of Shares Outstanding Prior to the Transaction	Total Number of Shares held by Non-Affiliates Prior to the Transaction (1)	Total Number of Shares Issued or Issuable to Sthe Selling Stockholder in the Transaction	Shares Issued or Issuable in Transaction as a Percentage of Shares held by Non-Affilia	Prior to the Transactio (2)	elPrice Per Share
Abel G. Halpern (4) Alan T. Yuasa as Trustee of	12/18/12	4,541,867	3,077,139	161,967	5.3	\$ 4.00	\$ 2.70
the Michael J. Shimoko Trust (5)	9/9/10	2,551,503	1,912,418	19,011	1.0	\$ 8.00	\$ 2.70
	11/26/12	4,541,867	3,077,139	48,434	1.6	\$ 4.00	\$ 2.70
Alexander Zukiwski (6)	11/26/12	4,541,867	3,077,139	242,026	7.9	\$ 4.00	\$ 2.70
Arie S. Belldegrun, M.D. (6)	8/9/05	-	-	3,115	N/A	\$ 0.004	\$ 2.70
Arie and Rebecka Belldegrun as Trustees of the Belldegrun Family Trust dated February 18, 1994 (7)	6/2/08	1,246,099	521,248	23,764	4.6	\$ 19.36	\$ 2.70
• • • • • • • • • • • • • • • • • • • •	11/26/12	4,541,867	3,077,139	564,728	18.4	\$ 4.00	\$ 2.70
Auriga Investors – Montserrat Global Fund (8)	11/26/12	4,541,867	3,077,139	1,210,137	39.3	\$ 4.00	\$ 2.70
Benjamin Domb (9)	11/26/12	4,541,867	3,077,139	322,701	10.5	\$ 4.00	\$ 2.70
Brio Capital Master Fund Ltd. (10)	12/18/12	4,541,867	3,077,139	623,473	20.3	\$ 4.00	\$ 2.70
Commercial Street Capital LLC (11)	9/9/10	2,551,503	1,912,418	421,388	22.0	\$ 8.00	\$ 2.70
Gerald Lieberman (12)	11/26/12 6/2/08 12/18/12	4,541,867 1,246,099 4,541,867	3,077,139 521,248 3,077,139	2,016,895 5,153 39,864	65.5 * 1.3	4.00 \$ 19.36 \$ 4.00	\$ 2.70 \$ 2.70 \$ 2.70
Glenn Mattes (13)	11/26/12 11/26/12	4,541,867 4,541,867	3,077,139 3,077,139	80,673 322,701	2.6 10.5	\$ 4.00 \$ 4.00	\$ 2.70 \$ 2.70

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Green Fields Offshore Inc. (14)							
Henry Rothman (15)	6/2/08 12/18/12	1,246,099 4,541,867	521,248 3,077,139	3,400 47,840	* 1.6	\$ 19.36 \$ 4.00	\$ 2.70 \$ 2.70
Irvin R. Kessler (16)	6/2/08 12/18/12	1,246,099 4,541,867	521,248 3,077,139	18,879 153,083	3.6 5.0	\$ 19.36 \$ 4.00	\$ 2.70 \$ 2.70
Jeffrey E. Donfeld, a Professional Corporation, 401(k) Profit Sharing Plan (17)	12/18/12	4,541,867	3,077,139	79,732	2.6	\$ 4.00	\$ 2.70
Peter Kash and Donna Kash (JTWROS) (18)	8/9/05	-	-	205,141	N/A	\$ 0.004	\$ 2.70
	6/2/08 9/9/10 11/26/12	1,246,099 2,551,503 4,541,867	521,248 1,912,418 3,077,139	5,980 35,203 290,433	1.1 1.8 9.4	\$ 19.36 \$ 8.00 \$ 4.00	\$ 2.70 \$ 2.70 \$ 2.70
Leumi Overseas Trust Corporation Limited as Trustee of the BTL Trust (19)	8/9/05	-	-	7,739	N/A	\$ 0.004	\$ 2.70
Leumi Overseas Trust	6/2/08	1,246,099	521,248	47,529	9.1	\$ 19.36	\$ 2.70
Corporation Limited as Trustee of Tampere Trust (20)	11/26/12	4,541,867	3,077,139	484,054	15.7	\$ 4.00	\$ 2.70
Maxim Partners, LLC (21)	11/26/12	4,541,867	3,077,139	291,250	9.5	\$ 4.00	\$ 2.70
MDRB Partnership, L.P. (22)	6/2/08	1,246,099	521,248	23,764	4.6	\$ 19.36	\$ 2.70
D T. C.	11/26/12	4,541,867	3,077,139	242,026	7.9	\$ 4.00	\$ 2.70
Perceptive Live Sciences Master Fund Ltd.(23) Portifer (Course) H.L.P.	11/26/12	4,541,867	3,077,139	4,840,554	157.3	\$ 4.00	\$ 2.70
Pontifax (Cayman) II L.P. (24)	9/9/10	2,551,503	1,912,418	278,813	14.6	\$ 8.00	\$ 2.70
Pontifax (Israel) II -	12/18/12	4,541,867	3,077,139	791,772	25.7	\$ 4.00	\$ 2.70
Individual Investors L.P. (25)	9/9/10	2,551,503	1,912,418	78,152	4.3	\$ 8.00	\$ 2.70
	12/18/12	4,541,867	3,077,139	231,518	7.5	\$ 4.00	\$ 2.70
Pontifax (Israel) II L.P. (26)		2,551,503	1,912,418	210,019	11.0	\$ 8.00	\$ 2.70
Quantum Partners, LP (27)	12/18/12 11/26/12	4,541,867 4,541,867	3,077,139 3,077,139	596,413 5,243,931	19.4 170.4	\$ 4.00 \$ 4.00	\$ 2.70 \$ 2.70
Sabby Healthcare Volatility	11/26/12	4,541,867	3,077,139	1,983,267	64.5	\$ 4.00	\$ 2.70
Master Fund, Ltd. (28) Sabby Volatility Warrant Master Fund, Ltd. (29)	11/26/12	4,541,867	3,077,139	1,208,201	39.3	\$ 4.00	\$ 2.70
Primafides (Suisse) as Trustees of the Sirius Trust (30)	8/9/05	-	-	24,922	N/A	\$ 0.004	\$ 2.70
	6/2/08 9/9/10 12/18/12	1,246,099 2,551,503 4,541,867	521,248 1,912,418 3,077,139	42,803 19,011 80,982	8.2 1.0 2.6	\$ 19.36 \$ 8.00 \$ 4.00	\$ 2.70 \$ 2.70 \$ 2.70
	6/2/08	1,246,099	521,248	6,801	1.3	\$ 19.36	\$ 2.70

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Rachel Family Partnership LP (31)							
	12/18/12	4,541,867	3,077,139	39,864	1.3	\$ 4.00	\$ 2.70
The Donfeld Living Trust, dated February 3, 1983, as amended (32)	11/26/12	4,541,867	3,077,139	79,423	2.6	\$ 4.00	\$ 2.70
Uzi Zucker (33)	11/26/12	4,541,867	3,077,139	161,348	5.2	\$ 4.00	\$ 2.70

- * represents less than 1%.
- (1) Excludes shares held by the selling stockholders, affiliates of the Company, or affiliates of the selling stockholders.
- (2) Because there was no market for our common stock at the time of the transaction, the listed price represents the negotiated price per share at the time of the transaction.
- (3) Represents the average of the high and low prices of our common stock as reported on the OTCQB on January 27, 2014.
 - In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 41,666 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 41,666 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 41,666 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the
- (4)selling stockholder of 3,091 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 41,666 shares of common stock, (ii) an interest payment of 6,101 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 69,443 shares.

 In connection with our September 2010 private placement: (i) 100,000 shares of Series A Preferred Stock were issued to the selling stockholder; (ii) two-and-one-half-year warrants to purchase 8,000 shares of Series A Preferred Stock at an exercise price of \$1.00 per share were issued to the selling stockholder; and (iii) five-year warrants to purchase 42,000 shares of Series A Preferred Stock at an exercise price of \$1.15 per share were issued to the selling stockholder. On February 9, 2011, the effective date of the Company's registration statement filed in connection with our September 2010 private placement, such securities were automatically converted into (i) 12,761 shares of common stock; (ii) two-and-one-half-year warrants to purchase 1,000 shares of common stock at an exercise price of \$8.00 per share; and (iii) five-year warrants to purchase 5,250 shares of common stock at an exercise price of \$9.20 per share. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8%
- (5) debentures convertible into 12,500 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 12,500 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 12,500 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 741 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 12,500 shares of common stock, (ii) an interest payment of 1,830 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 20,833 shares.
- (6) In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 62,500 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 62,500 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 62,500 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 2,472 shares of common stock due to our failure to successfully cause a registration

statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 62,500 shares of common stock, (ii) an interest payment of 9,152 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 104,166 shares.

(6) On August 9, 2005, 3,115 founders shares were issued to Arie S. Belldegrun, M.D.

In connection with our September 2010 private placement: (i) 125,000 shares of Series A Preferred Stock were issued to the selling stockholders; (ii) two-and-one-half-year warrants to purchase 10,000 shares of Series A Preferred Stock at an exercise price of \$1.00 per share were issued to the selling stockholders; and (iii) five-year warrants to purchase 52,500 shares of Series A Preferred Stock at an exercise price of \$1.15 per share were issued to the selling stockholders. On February 9, 2011, the effective date of the Company's registration statement filed in connection with our September 2010 private placement, such securities were automatically converted into (i) 15,952 shares of common stock; (ii) two-and-one-half-year warrants to purchase 1,250 shares of common stock at an exercise price of \$8.00 per share; and (iii) five-year warrants to purchase 6,562 shares of common stock at an exercise price of \$9.20 per share. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 145,833 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 145,833 shares of common stock at an exercise price of \$4.00 per share were issued

- debentures convertible into 145,833 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 145,833 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 145,833 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 8,652 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 145,833 shares of common stock, (ii) an interest payment of 21,355 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 243,055 shares.
 - In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 312,500 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 312,500 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 312,500 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid
- (8) liquidated damages to the selling stockholder of 18,541 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 312,500 shares of common stock, (ii) an interest payment of 45,763 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 520,833 shares.
 - In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 83,333 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 83,333 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 83,333 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to
- (9) the selling stockholder of 4,944 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 83,333 shares of common stock, (ii) an interest payment of 12,203 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 138,888 shares.
- (10) In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 166,666 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 166,666 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 166,666 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid

liquidated damages to the selling stockholder of 12,365 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 166,666 shares of common stock, (ii) an interest payment of 24,407 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 277,776 shares.

In connection with our September 2010 private placement: (i) 2,200,000 shares of Series A Preferred Stock were issued to the selling stockholder; (ii) two-and-one-half-year warrants to purchase 176,000 shares of Series A Preferred Stock at an exercise price of \$1.00 per share were issued to the selling stockholder; (iii) five-year warrants to purchase 924,000 shares of Series A Preferred Stock at an exercise price of \$1.15 per share were issued to the selling stockholder; and (iv) five-year warrants to purchase 25,000 shares of Series A Preferred Stock at an exercise price of \$1.10 per share were issued to Steven B. Ruchefsky as a designee of Riverbank Capital Securities, Inc., which served as placement agent. On February 9, 2011, the effective date of the Company's registration statement filed in connection with our September 2010 private placement, such securities were automatically converted into (i) 280,763 shares of common stock; (ii) two-and-one-half-year warrants to purchase 22,000 shares of common stock at an exercise price of \$8.00 per share; (iii) five-year warrants to purchase 3 125 shares of common stock at an exercise price of \$8.80 per share; and (iv) five-year warrants to purchase 3 125 shares of common stock at an exercise price of \$8.80 per share. In connection with our 2012

purchase 3,125 shares of common stock at an exercise price of \$8.80 per share. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 520,833 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 520,833 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 520,833 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 30,902 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 520,833 shares of common stock, (ii) an interest payment of 76,272 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 868,055 shares. Mr. Ruchefsky, a member of our board of directors, is president of the selling stockholder.

- In connection with our June 2, 2008 private placement, 5,153 shares of common stock were issued to the selling stockholder. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 10,416 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 10,416 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 10,416 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid
- (12) liquidated damages to the selling stockholder of 772 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 10,416 shares of common stock, (ii) an interest payment of 900 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 17,360 shares.
 - In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 20,833 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 20,833 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 20,833 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to
- (13) the selling stockholder of 1,236 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 20,833 shares of common stock, (ii) an interest payment of 1,800 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 34,721 shares. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 83,333 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 83,333 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 83,333 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to
- (14) the selling stockholder of 4,944 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 83,333 shares of common stock, (ii) an interest payment of 12,203 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 138,888 shares.
- (15) In connection with our June 2, 2008 private placement: (i) 3,091 shares of common stock were issued to the selling stockholder; and (ii) five-year warrants to purchase 309 shares of common stock at an exercise price of \$19.36 per share were issued to the selling stockholder. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 12,500 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 12,500 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 12,500 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 927 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 12,500 shares of common stock, (ii) an interest payment of 1,080 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for

purchase pursuant to such warrant increased to 20,833 shares.

- In connection with our June 2, 2008 private placement: (i) 18,570 shares of common stock were issued to the selling stockholder; and (ii) five-year warrants to purchase 309 shares of common stock at an exercise price of \$19.36 per share were issued to the selling stockholder. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 41,750 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 41,750 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 41,7503 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In
- (16) March, April and May 2013, we paid liquidated damages to the selling stockholder of 3,097 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 41,750 shares of common stock, (ii) an interest payment of 3,609 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 69,583 shares.
 - In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8%debentures convertible into 20,833 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 20,833 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 20,833 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to
- (17) the selling stockholder of 1,545 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 20,833 shares of common stock, (ii) an interest payment of 1,800 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 34,721 shares.

On August 9, 2005: (i) 160,282 founders shares were issued to Peter Kash; and (ii) 44,859 founders shares were issued to Mrs. Kash as custodian for the benefit of their minor children under the UGMA. In connection with our June 2, 2008 private placement: (i) 5,671 shares of common stock were issued to Dr. Kash; and (ii) five-year warrants to purchase 309 shares of common stock at an exercise price of \$19.36 per share were issued to Dr. Kash. In connection with our September 2010 private placement: (i) 100,000 shares of Series A Preferred Stock were issued to the selling stockholders; (ii) two-and-one-half-year warrants to purchase 8,000 shares of Series A Preferred Stock at an exercise price of \$1.00 per share were issued to the selling stockholders; (iii) five-year warrants to purchase 42,000 shares of Series A Preferred Stock at an exercise price of \$1.15 per share were issued to the selling stockholders; and (iv) five-year warrants to purchase 129,534 shares of Series A Preferred Stock at an exercise price of \$1.10 per share were issued to Dr. Kash as a designee of Riverbank Capital Securities, Inc., which served as placement agent. On February 9, 2011, the effective date of the Company's registration statement filed in connection with our September 2010 private placement, such securities were automatically converted into (i) 12,761 shares of common stock; (ii) two-and-one-half-year warrants to purchase 1,000 shares of common

- (18) stock at an exercise price of \$8.00 per share; (iii) five-year warrants to purchase 5,250 shares of common stock at an exercise price of \$9.20 per share; and (iv) five-year warrants to purchase 16,191 shares of common stock at an exercise price of \$8.80 per share. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 75,000 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 75,000 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 75,000 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 4,450 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 75,000 shares of common stock, (ii) an interest payment of 10,983 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 125,000 shares.
 - In connection with our June 2, 2008 private placement, 7,739 shares of common stock were issued to the selling stockholder. In connection with our September 2010 private placement: (i) 250,000 shares of Series A Preferred Stock were issued to the selling stockholder; (ii) two-and-one-half-year warrants to purchase 20,000 shares of Series A Preferred Stock at an exercise price of \$1.00 per share were issued to the selling stockholder; and (iii)
- (19) five-year warrants to purchase 105,000 shares of Series A Preferred Stock at an exercise price of \$1.15 per share were issued to the selling stockholder. On February 9, 2011, the effective date of the Company's registration statement filed in connection with our September 2010 private placement, such securities were automatically converted into (i) 31,904 shares of common stock; (ii) two-and-one-half-year warrants to purchase 2,500 shares of common stock at an exercise price of \$8.00 per share; and (iii) five-year warrants to purchase 13,125 shares of common stock at an exercise price of \$9.20 per share.
- (20) In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 125,000 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 125,000 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 125,000 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 7,416 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 125,000 shares of common stock, (ii) an interest payment of 18,305 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to

208,333 shares.

- In connection with our 2012 Debenture and Warrant Offering: (i) 7,500 shares of common stock were issued to (21)the selling stockholder and (ii) five-year warrants to purchase 283,750 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder.
 - In connection with our September 2010 private placement: (i) 125,000 shares of Series A Preferred Stock were issued to the selling stockholder; (ii) two-and-one-half-year warrants to purchase 10,000 shares of Series A Preferred Stock at an exercise price of \$1.00 per share were issued to the selling stockholder; and (iii) five-year warrants to purchase 52,500 shares of Series A Preferred Stock at an exercise price of \$1.15 per share were issued to the selling stockholder. On February 9, 2011, the effective date of the Company's registration statement filed in connection with our September 2010 private placement, such securities were automatically converted into (i) 15,952 shares of common stock; (ii) two-and-one-half-year warrants to purchase 1,250 shares of common stock at an exercise price of \$8.00 per share; and (iii) five-year warrants to purchase 6,562 shares of common stock at an exercise price of \$9.20 per share. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8%
- debentures convertible into 62,500 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 62,500 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 62,500 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 3,708 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 62,500 shares of common stock, (ii) an interest payment of 9,152 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 3,708 shares.

In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 1,250,000 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 1,250,000 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 1,250,000 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 74,166 shares of common stock due to our failure to successfully

- (23) liquidated damages to the selling stockholder of 74,166 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 1,250,000 shares of common stock, (ii) an interest payment of 183,055 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 2,083,333 shares.
 - In connection with our September 2010 private placement: (i) 1,466,512 shares of Series A Preferred Stock were issued to the selling stockholder; (ii) two-and-one-half-year warrants to purchase 117,321 shares of Series A Preferred Stock at an exercise price of \$1.00 per share were issued to the selling stockholder; and (iii) five-year warrants to purchase 615,935 shares of Series A Preferred Stock at an exercise price of \$1.15 per share were issued to the selling stockholder. On February 9, 2011, the effective date of the Company's registration statement filed in connection with our September 2010 private placement, such securities were automatically converted into (i) 187,156 shares of common stock; (ii) two-and-one-half-year warrants to purchase 14,665 shares of common stock at an exercise price of \$8.00 per share; and (iii) five-year warrants to purchase 76,991 shares of common stock at an exercise price of \$9.20 per share. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 203 682 shares of common stock were issued to the selling stockholder.
- three-year 8% debentures convertible into 203,682 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 203,682 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 203,682 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 15,111 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 203,682 shares of common stock, (ii) an interest payment of 29,827 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 339,470 shares.
- (25) In connection with our September 2010 private placement: (i) 428,820 shares of Series A Preferred Stock were issued to the selling stockholder; (ii) two-and-one-half-year warrants to purchase 34,306 shares of Series A Preferred Stock at an exercise price of \$1.00 per share were issued to the selling stockholder; and (iii) five-year warrants to purchase 180,104 shares of Series A Preferred Stock at an exercise price of \$1.15 per share were issued to the selling stockholder. On February 9, 2011, the effective date of the Company's registration statement filed in connection with our September 2010 private placement, such securities were automatically converted into (i) 54,725 shares of common stock; (ii) two-and-one-half-year warrants to purchase 4,288 shares of common stock at an exercise price of \$8.00 per share; and (iii) five-year warrants to purchase 22,513 shares of common stock at an exercise price of \$9.20 per share. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 59,558 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 59,558 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 59,558 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 4,418 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i)

the debentures were converted into 59,558 shares of common stock, (ii) an interest payment of 8,721 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 99,263 shares.

In connection with our September 2010 private placement: (i) 1,104,668 shares of Series A Preferred Stock were issued to the selling stockholder; (ii) two-and-one-half-year warrants to purchase 88,373 shares of Series A Preferred Stock at an exercise price of \$1.00 per share were issued to the selling stockholder; and (iii) five-year warrants to purchase 463,961 shares of Series A Preferred Stock at an exercise price of \$1.15 per share were issued to the selling stockholder. On February 9, 2011, the effective date of the Company's registration statement filed in connection with our September 2010 private placement, such securities were automatically converted into (i) 140,977 shares of common stock; (ii) two-and-one-half-year warrants to purchase 11,046 shares of common stock at an exercise price of \$8.00 per share; and (iii) five-year warrants to purchase 57,995 shares of common stock at an exercise price of \$9.20 per share. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 153,426 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 153,426 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 11,383 shares of common stock

share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 153,426 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 11,383 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 153,426 shares of common stock, (ii) an interest payment of 22,468 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 255,710 shares.

In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 1,354,166 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 1,354,166 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 1,354,166 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated demands to the selling stockholder of \$0.347 shares of common stock due to our failure to successfull

- (27) liquidated damages to the selling stockholder of 80,347 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 1,354,166 shares of common stock, (ii) an interest payment of 198,309 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 2,256,943 shares.
 - In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 518,470 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 520,833 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 520,833 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid
- (28) liquidated damages to the selling stockholder of 30,902 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 518,470 shares of common stock, (ii) an interest payment of 45,007 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 868,055 shares.
 - In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 312,500 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 312,500 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 312,500 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid
- (29) liquidated damages to the selling stockholder of 18,541 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 312,500 shares of common stock, (ii) an interest payment of 26,990 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 520,833 shares.
- (30) On August 9, 2005, 24,922 founders shares were issued to the selling stockholder. In connection with our June 2, 2008 private placement: (i) 41,258 shares of common stock were issued to the selling stockholder; and (ii) five-year warrants to purchase 1,545 shares of common stock at an exercise price of \$19.36 per share were issued to the selling stockholder. In connection with our September 2010 private placement: (i) 100,000 shares of Series A Preferred Stock were issued to the selling stockholder; (ii) two-and-one-half-year warrants to purchase 8,000 shares of Series A Preferred Stock at an exercise price of \$1.00 per share were issued to the selling stockholder; and (iii) five-year warrants to purchase 42,000 shares of Series A Preferred Stock at an exercise price of \$1.15 per share were issued to the selling stockholder. On February 9, 2011, the effective date of the Company's registration statement filed in connection with our September 2010 private placement, such securities were automatically converted into (i) 12,761 shares of common stock; (ii) two-and-one-half-year warrants to purchase 1,000 shares of common stock at an exercise price of \$8.00 per share; and (iii) five-year warrants to purchase 5,250 shares of common stock at an exercise price of \$9.20 per share. In connection with our 2012 Debenture and Warrant

Offering: (i) three-year 8% debentures convertible into 20,833 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 20,833 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 20,833 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 1,545 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 20,833 shares of common stock, (ii) an interest payment of 3,050 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 34,721 shares.

In connection with our June 2, 2008 private placement: (i) 6,183 shares of common stock were issued to the selling stockholder; and (ii) five-year warrants to purchase 618 shares of common stock at an exercise price of \$19.36 per share were issued to the selling stockholder. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 10,416 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 10,416 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 10,416 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to the selling stockholder of 772 shares of common

(31) March, April and May 2013, we paid liquidated damages to the selling stockholder of 772 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 10,416 shares of common stock, (ii) an interest payment of 900 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 17,360 shares.

In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 20,833 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 20,833 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 20,833 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to

- (32) the selling stockholder of 1,236 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 20,833 shares of common stock, (ii) an interest payment of 1,800 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 34,721 shares. In connection with our 2012 Debenture and Warrant Offering: (i) three-year 8% debentures convertible into 41,666 shares of common stock were issued to the selling stockholder, (ii) five-year Series A warrants to purchase 41,666 shares of common stock at an exercise price of \$4.00 per share were issued to the selling stockholder, and (iii) eighteen-month Series B warrants to purchase 41,666 shares of common stock at an exercise price of \$2.40 per share were issued to the selling stockholder. In March, April and May 2013, we paid liquidated damages to
- (33) the selling stockholder of 2,472 shares of common stock due to our failure to successfully cause a registration statement covering the resale of 100% of the registrable securities to be declared effective by the SEC by March 26, 2013. On October 29, 2013, the closing date of our 2013 Offering, (i) the debentures were converted into 41,666 shares of common stock, (ii) an interest payment of 6,101 shares was paid pursuant to the conversion of the debentures and (iii) the exercise price of the Series A warrants was adjusted to \$2.40 per share and the number of shares of common stock available for purchase pursuant to such warrant increased to 69,443 shares.

Comparison of Registered Shares to Outstanding Shares

The following table compares the number of shares held by persons other than the selling stockholders, affiliates of the Company, and affiliates of the selling stockholders with the number of shares registered for resale and sold by such parties in prior transactions as well as in the current transaction involving the 2013 Warrants:

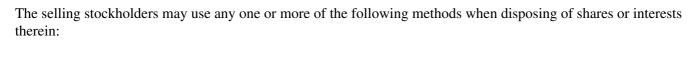
Shares outstanding prior to the 2013 Offering held by persons other than the selling stockholders, affiliates of the Company, or affiliates of the selling stockholders	3,419,184
Shares registered for resale by the selling stockholders or affiliates of the selling stockholders in prior registration statements, including shares issuable upon the exercise of warrants	7,053,808
Shares registered for resale by selling stockholders or affiliates of the selling stockholders that continue to be held by such persons, including shares issuable upon the exercise of warrants	6,983,308 (1)
Shares sold in registered resale transactions by the selling stockholders or affiliates of the selling stockholders	0
Shares registered for resale on behalf of the selling stockholders or affiliates of the selling stockholders in connection with the 2013 Offering, including shares issuable upon the exercise of	38,671,405

warrants

(1) Reflects the expiration of certain warrants for which the underlying shares were previously registered.

PLAN OF DISTRIBUTION

We are registering the shares offered by this prospectus on behalf of the selling stockholders. 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 sales may be at fixed or negotiated prices. To the extent any of the selling stockholders gift, pledge or otherwise transfer the shares offered hereby, such transferees may offer and sell the shares from time to time under this prospectus, provided that this prospectus has been amended under Rule 424(b)(3) or other applicable provision of the Securities Act to include the name of such transferee in the list of selling stockholders under this prospectus.



- ·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;
- settlement of short sales entered into after the effective date of the registration statement of which this prospectus is a part;
- in transactions through broker-dealers that agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise:

·a combination of any such methods of sale; and

·any other method permitted pursuant to applicable law.

The selling stockholders may also sell the shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with the sale of the shares 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 shares in the course of hedging the positions they assume. The selling stockholders may also sell shares short and deliver these shares to close out their short positions, or loan or pledge the shares to broker-dealers that in turn may sell these shares. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create 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 selling stockholders and any broker-dealers or agents that are involved in selling the shares may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each selling stockholder has informed us that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the shares. In no event shall any broker-dealer receive fees, commissions and markups which, in the aggregate, would exceed eight percent (8%).

We are required to pay certain fees and expenses incurred by us incident to the registration of the shares. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because selling stockholders may be deemed to be "underwriters" within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. The selling stockholders have advised us that there is no underwriter or coordinating broker acting in connection with the proposed sale of the shares by the selling stockholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the shares may be resold by the selling stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for us to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) the date on which all of the shares have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The shares will be sold only through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the shares covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of our securities by the selling stockholders or any other person. We will make copies of this prospectus available to the selling stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

Shares Eligible For Future Sale

Upon completion of this offering and assuming the issuance of all shares offered hereby that are issuable upon exercise of warrants, there will be 50,628,961 shares of our common stock issued and outstanding. The shares purchased in this offering will be freely tradable without registration or other restriction under the Securities Act, except for any shares purchased by an "affiliate" of our company (as defined in the Securities Act).

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, provided they meet the criteria and conform to the requirements of such rule. Rule 144 governs resale of "restricted securities" for the account of any person (other than us), and restricted and unrestricted securities for the account of an "affiliate" of ours. Restricted securities generally include any securities acquired directly or indirectly from us or our affiliates, which were not issued or sold in connection with a public offering registered under the Securities Act. An affiliate of ours is any person who directly or indirectly controls us, is controlled by us, or is under common control with us. Our affiliates may include our directors, executive officers, and persons directly or indirectly owing 10% or more of our outstanding common stock. In general, under Rule 144, a person (or persons whose shares are aggregated) who is not deemed to have been an affiliate of ours at the time of, or at any time during the three months preceding, a sale, and who has beneficially owned restricted securities for at least six months would be entitled to sell those shares, subject to the requirements of Rule 144 regarding publicly available information about us. Affiliates may only sell in any three month period that number of shares that does not exceed the greater of 1 percent of the then-outstanding shares of our common stock or the average weekly trading volume of our shares of common stock in the over-the-counter market during the four calendar weeks preceding the sale. However, because we were formerly a "shell company," in order for the holders of our restricted securities to resell their shares in reliance upon Rule 144, we are required to have been subject to the public reporting requirements of the Exchange Act for at least 90 days, and to have filed all reports required to be filed during the 12 months preceding such sale (or such shorter period that we were required to file such reports).

Following the date of this prospectus, we cannot predict the effect, if any, that sales of our common stock or the availability of our common stock for sale will have on the market price prevailing from time to time. Nevertheless, sales by existing stockholders of substantial amounts of our common stock could adversely affect prevailing market prices for our stock.

DESCRIPTION OF CAPITAL STOCK

General

Our amended and restated certificate of incorporation, as amended, authorizes us to issue 535,000,000 shares of capital stock, par value \$0.0001 per share, comprised of 500,000,000 shares of common stock, and 35,000,000 shares of preferred stock.

As of the date of this prospectus, we have issued and outstanding approximately:

- \cdot 20,370,910 shares of our common stock,
- options to purchase 5,753,5263 shares of our common stock at exercise prices ranging from \$2.40 to \$24.00 per share, and
- warrants to purchase 47,983,751 shares of our common stock at exercise prices ranging from \$2.40 to \$19.36 per share.

Common Stock

The holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders and do not have cumulative voting rights. Upon our liquidation, dissolution or winding down, holders of our common stock will be entitled to share ratably in all of our assets that are legally available for distribution, after payment of all debts and other liabilities. The holders of our common stock have no preemptive, subscription, redemption or conversion rights.

Holders of our common stock are entitled to receive such dividends, as the board of directors may from time to time declare out of funds legally available for the payment of dividends. We seek growth and expansion of our business through the reinvestment of profits, if any, and do not anticipate that we will pay dividends in the foreseeable future.

On November 15, 2010, our stockholders, acting by written consent together as a single class, authorized the amendment of our amended and restated certificate of incorporation in order to effect a combination (reverse split) of our common stock at a ratio not to exceed one-for-eight, provided that our board of directors shall have absolute discretion to determine and fix the exact ratio of such combination (not to exceed one-for-eight) and the time at which such combination shall become effective, if ever. Our board of directors approved a one-for-eight reverse split of our common stock, effective as of October 29, 2013 immediately prior to the entry into the purchase agreement for the

2013 Offering. Our board of directors amended our amended and restated certificate of incorporation to effect this reverse split.

Authority to Issue Stock

Our board of directors has the authority to issue the authorized but unissued shares of our common stock without action by the shareholders. The issuance of such shares would reduce the percentage ownership held by current shareholders.

Our amended and restated certificate of incorporation authorizes the issuance of up to 35,000,000 shares of preferred stock, all of which are currently designated as Series A Convertible Preferred Stock. Following the conversion of our Series A Preferred Stock into common stock on February 9, 2011, our board of directors has the authority to fix and determine the relative rights and preferences of up to 35,000,000 preferred shares, as well as the authority to issue such shares, without further stockholder approval. As a result, our board of directors could authorize the issuance of a series of preferred stock that is senior to our common stock and that would grant to holders preferred rights to our assets upon liquidation, the right to receive dividends, additional registration rights, anti-dilution protection, the right to the redemption to such shares, together with other rights, none of which will be afforded holders of our common stock.

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Market Information

Our common stock is currently eligible for trading on the OTCQB tier of the OTC Markets under the symbol "ARNI." The historical trading of our common stock has been extremely limited and sporadic. Set forth below are the high and low sales prices for our common stock during each quarter within the last two fiscal years, as reported by the Pink Sheets, the OTCBB, or the OTCQB, as applicable. The quotations reflect inter-dealer prices, without retail markup, markdown, or commission, and may not represent actual transactions. Consequently, the information provided below may not be indicative of our common stock price under different conditions.

Quarter Ended	High	Low
March 31, 2012	\$10.00	\$4.80
June 30, 2012	\$8.08	\$0.80
September 30, 2012	\$3.92	\$0.88
December 31, 2012	\$4.00	\$0.80
March 31, 2013	\$36.00	\$4.80
June 30, 2013	\$5.20	\$2.56
September 30, 2013	\$3.60	\$1.28
December 31, 2013	\$4.24	\$2.40

Holders

According to the records of our transfer agent, American Stock Transfer & Trust Company, as of December 26, 2013, we had approximately 374 holders of record of common stock, not including those held in "street name."

Dividends

We have never declared or paid a dividend on our common stock and do not anticipate paying any cash dividends in the foreseeable future.

Securities Authorized for Issuance under Equity Compensation Plans

We grant stock options and other equity incentive awards pursuant to our 2005 Stock Option Plan (the "Plan"), which has been approved by our stockholders. The following table sets forth certain information as of December 31, 2013 with respect to the Plan:

Number of Securities to be Issued Upon Exercise Outstanding Options (A)	Weighted-Average Exercise Price of Outstanding Options (B) Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (A)) (C)
	Securities to be Issued Upon Exercise Outstanding Options

Number of Securities

Equity compensation plans approved by security			
holders:			
2005 Stock Option Plan	5,758,463	\$ 2.66	5,356,853
-			
Equity compensation plans not approved by			
stockholders:			
None	_		
Total	5,758,463	\$ 2.66	5,356,853

On January 14, 2013, our Board of Directors approved an amendment to the Plan to increase the number of shares of common stock issuable under the Plan from 875,000 shares to 945,276 shares. Also on January 14, 2013, our Board of Directors authorized amendments to outstanding stock option awards relating to an aggregate of 555,547 shares to reduce the exercise price of such stock options from \$8.00 to \$2.40 per share, which price the Board of Directors determined was at least equal to the fair market value of our common stock. On October 7, 2013, our Board of Directors approved an amendment to the Plan to increase the number of shares of common stock issuable under the Plan from 945,276 to 11,155,295 shares.

MANAGEMENT'S DISCUSSION AND ANALYSIS

OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and plan of operations should be read in conjunction with the financial statements and the notes to those statements included in this prospectus. This discussion includes forward-looking statements that involve risk and uncertainties. As a result of many factors, such as those set forth in this prospectus under "Risk Factors," actual results may differ materially from those anticipated in these forward-looking statements.

Company Overview

We are a development stage company focused on developing innovative products for the treatment of cancer. The following is a summary of our product development pipeline:

Onapristone - On February 13, 2012, we entered into a license agreement granting us rights to develop and commercialize onapristone, an anti-progestin hormone blocker that has been previously reported to have considerable anti-tumor activity in patients with breast cancer. Onapristone appears to have a unique ability to block the activation of the progesterone receptor and inhibit tumor growth. Onapristone was originally developed by Schering AG for potential use in the treatment of benign gynecological disorders (uterine leiomyoma, endometriosis), as a contraceptive and an anti-endocrine treatment of breast cancer. In published clinical studies, onapristone has demonstrated a 56% objective response rate as a first line "hormone" treatment of patients with breast cancer. In connection with the development of onapristone, we have engaged Leica Biosystems to perform a feasibility study leading to the development of an immunohistochemistry based diagnostic test to identify tumors with the activated form of the progesterone receptor, which may identify which patients are more likely to benefit from treatment with onapristone. We have also engaged Clarient Diagnostic Services, Inc. to perform the interpretation/analysis of tumor samples with the developed diagnostic test. We completed initial pre-clinical toxicology studies that enabled the submission of an Investigational Medicinal Product Dossier, or IMPD, the foreign equivalent of an investigational new drug application, or IND, in the second quarter of 2013 to support a pharmacokinetic/food effect study, which we completed in the fourth quarter of 2013. We also submitted an IMPD to support the conduct of a Phase I study in patients with progesterone receptor expressing cancers in the third quarter of 2013. We initiated this study in the fourth quarter of 2013 and began enrolling patients in early 2014. We are also investigating onapristone as a potential treatment for patients with prostate cancer and have submitted an IMPD in the fourth quarter of 2013 with the intent of starting a Phase I clinical study in adult male subjects with castrate resistant prostate cancer during the first quarter of 2014.

AR-42 – AR-42 is being developed as an orally available, broad spectrum inhibitor of both histone and non-histone deacetylation proteins, or Pan-DAC, which play an important role in the regulation of gene expression, cell growth and survival. In preclinical studies, AR-42 has demonstrated greater potency and activity in solid tumors and hematological malignancies when compared to vorinostat (also known

as SAHA and marketed as Zolinza® by Merck). These data demonstrate the potent and potential differentiating activity of AR-42. Additionally, pre-clinical findings presented at the 2009 American Society of Hematology Annual Meeting showed that AR-42 potently and selectively inhibits leukemic stem cells in acute myeloid leukemia, or AML. AR-42 is currently being studied in an investigator-initiated Phase I/II clinical study in adult subjects with relapsed or refractory hematological malignancies: multiple myeloma, chronic lymphocytic leukemia (CLL), or lymphoma. The recommended Phase II dose, or RP2D, in patients with hematological malignancies has been determined and the expansion phase of the program has been initiated. We expect that the expansion phase of the hematological malignancy cohort will take at least 12 months to complete. The protocol has been amended to include a separate solid tumor dose escalation cohort and patients are being actively screened to enter into this cohort. We are also supporting an investigator initiated Phase I study of AR-42 in combination with decitabine in patients with hematological malignancies that was initiated during the third quarter of 2013. In preclinical studies, AR-42 has demonstrated anti-tumor activity in both meningioma and schwannoma. Meningioma and schwannoma are rare, benign tumors that can present in different locations within the brain and the spinal cord and may cause substantial morbidity for those affected individuals. The primary treatment option for patients with these tumors is surgical excision. In February 2012, the FDA granted two orphan drug designations for AR-42 for the treatment of meningioma and the treatment of schwannoma of the central nervous system. Additionally, AR-42 has been granted three orphan-drug designations by the European Medicines, or EMA, for the treatment of neurofibromatosis type 2 (NF2), the treatment of meningioma and the treatment of schwannoma. NF2 is a rare genetic disorder characterized by the growth of noncancerous tumors in the brain and spinal cord, juvenile cataracts, and neurofibromas of the skin.

AR-12 – We are also developing AR-12 as an orally available, targeted anti-cancer agent that has been shown in early pre-clinical studies to inhibit phosphoinositide dependent protein kinase-1, or PDK-1, a protein in the PI3K/Akt pathway that is involved in the growth and proliferation of cells, including cancer cells. We believe AR-12 may also cause cell death through the induction of stress in the endoplasmic reticulum and work is ongoing to further understand the mechanism of action. Preliminary data demonstrates that AR-12 may inhibit multiple different kinase targets. In May 2009, the FDA accepted our IND for AR-12. We are currently conducting a multi-centered Phase I clinical study of AR-12 in adult patients with advanced or recurrent solid tumors or lymphoma. The Phase I study of AR-12 was originally designed to be conducted in two parts. The first part is a dose-escalating study, which we refer to as the Escalation Phase, primarily designed to evaluate the safety of AR-12 in order to identify the MTD and RP2D for future studies of the compound. We have completed the dose escalation phase of the Phase I trial, and have determined the RP2D and MTD of the current formulation. Following the Escalation Phase, we planned to initiate the second part of the study, which we refer to as the Expansion Phase, which would have involved enrolling an expanded cohort of additional patients at the RP2D in multiple tumor types. We will not be moving forward with the Expansion Phase of this study as an improved formulation that has been shown to substantially increase bioavailability in preclinical models has been developed. During the first quarter of 2013, the last study subject completed the planned dose-escalation phase of the study.

We have no product sales to date and we will not generate any product revenue until we receive approval from the FDA or equivalent foreign regulatory bodies to begin selling our pharmaceutical product candidates. Developing pharmaceutical products is a lengthy and very expensive process. Assuming we do not encounter any unforeseen safety or other issues during the course of developing our product candidates, we do not expect to complete the development of a product candidate for several years, if ever. To date, almost all of our development expenses have been incurred on each of our product candidates: Onapristone, AR-42, AR-12 and AR-67. As we proceed with the clinical development of our product candidates, primarily focusing our resources on onapristone, our research and development expenses will further increase. To the extent we are successful in acquiring additional product candidates for our development pipeline, our need to finance further research and development will continue increasing. Accordingly, our success depends not only on the safety and efficacy of our product candidates, but also on our ability to finance the development of the products. To date, our major sources of working capital have been proceeds from private and public sales of our common and preferred stock and debt financings.

Research and development, or R&D, expenses consist primarily of salaries and related personnel costs, fees paid to consultants and outside service providers for pre-clinical, clinical, and manufacturing development, legal expenses resulting from intellectual property prosecution, costs related to obtaining and maintaining our product license agreements, contractual review, and other expenses relating to the design, development, testing, and enhancement of our product candidates. We expense our R&D costs as they are incurred.

General and administrative, or G&A, expenses consist primarily of salaries and related expenses for executive, finance and other administrative personnel, accounting, legal and other professional fees, business development expenses, rent, business insurance and other corporate expenses.

Our results include non-cash compensation expense as a result of the issuance of stock options and warrants. We expense the fair value of stock options and warrants over the vesting period. When more precise pricing data is unavailable, we determine the fair value of stock options using the Black-Scholes option-pricing model. The terms and vesting schedules for share-based awards vary by type of grant and the employment status of the grantee. Generally, the awards vest based upon time-based or performance-based conditions. Performance-based conditions generally include the attainment of goals related to our financial performance and product development. Stock-based compensation expense is included in the respective categories of expense in the statements of operations. We expect to record additional non-cash compensation expense in the future, which may be significant.

Results of Operations

Three and Nine Months Ended September 30, 2013 and September 30, 2012

General and Administrative Expenses. G&A expenses for the three months ended September 30, 2013 and 2012 were approximately \$0.6 million and \$0.5 million, respectively. There were no individually significant increases in G&A expenses between the two periods. G&A expenses for the nine months ended September 30, 2013 and 2012 were approximately \$2.1 million and \$1.7 million, respectively. This increase of approximately \$0.4 million over the same period in 2012 is primarily attributable to increased compensation costs, including stock compensation expenses, of approximately \$0.2 million to our CEO as result of a contractual increase in the CEO's salary and additional expenses recognized from a new stock option grant and a re-pricing of his previous grants made during the first quarter of 2013. There were no new grants or re-pricings during the first nine months of 2012. Additionally, there was an increase of approximately \$0.1 million over the same period in 2012 as a result of increased legal and consulting fees associated with the Company's active registration statement and amendments, including amendments with the Company's convertible debenture holders being negotiated during the first and second quarters of 2013, with no such transactions during the same period of 2012.

Research and Development Expenses. R&D expenses for the three months ended September 30, 2013 and 2012 were approximately \$3.2 million and \$2.1 million, respectively. The increase of approximately \$1.1 million compared to the same period in 2012 is primarily due to increased expenses incurred in further developing our lead product candidate, onapristone, as we prepare for various clinical trial and related activities. Total direct onapristone development costs for the quarter ended September 30, 2013 were approximately \$2.3 million compared to approximately \$1.1 million for the quarter ended September 30, 2012. This increase of \$1.2 million over the same period of 2012 is primarily due to an increase of approximately \$0.4 million in manufacturing costs relating to the production of clinical trials. Also, during the quarter ended September 30, 2013, we incurred approximately \$0.3 million in costs relating to a pharmacokinetic study of onapristone, including a milestone payment to the licensor, Invivis, with no such studies ongoing during the quarter ended September 30, 2013. Additionally, we had an increase of approximately \$0.3 million in costs for developing a companion diagnostic to onapristone during the quarter ended September 30, 2013 as compared to the same period in 2012.

R&D expenses for the nine months ended September 30, 2013 and 2012 were approximately \$8.9 million and \$6.3 million, respectively. The increase of approximately \$2.6 million compared to the same period in 2012 was primarily due to increased expenses incurred in further developing our lead product candidate, onapristone, as we prepare for various clinical trial and related activities. Total direct onapristone development costs for the nine months ended September 30, 2013 were approximately \$6.1 million compared to approximately \$2.9 million for the nine months ended September 30, 2012. There were significant increases in manufacturing and pre-clinical development activities of approximately \$1.7 million and \$0.6 million, respectively, compared to the nine months ended September 30, 2012. These increases are primarily driven by the fact that we had only recently acquired the rights to onapristone during the first quarter of 2012 and we were just beginning our development efforts versus the same period in 2013 where there were significant development efforts ongoing as we prepare for clinical trial activities planned in late 2013.

Also, during the nine months ended September 30, 2013, we incurred approximately \$0.3 million in costs relating to a pharmacokinetic study of onapristone, including a milestone payment to the licensor, with no such studies ongoing during the nine months ended September 30, 2012. Additionally, we had an increase of approximately \$0.4 million in costs for developing a companion diagnostic to onapristone during the nine months ended September 30, 2013 as compared to the same period in 2012.

Additionally, we had an increase of approximately \$0.3 million during the nine months ended September 30, 2013, compared to the same period of 2012, in compensation costs, including stock compensation costs relating to our R&D employees. During the first quarter of 2013, we granted new stock options and re-priced previously granted stock options, with no new grants or re-repricings during the same period of 2012.

These increases related to onapristone and stock compensation costs were partially offset by decreases of approximately \$0.3 million and \$0.5 million in costs related to our AR-67 and AR-42 programs, respectively. The decrease in AR-67 program costs was due to lower costs resulting from the termination of our AR-67 license agreement in late March of 2012. The AR-42 program cost decreases were driven primarily by the fact that during the nine months ended September 30, 2012, AR-42 was still undergoing various preclinical studies that were completed

by the end of 2012 and, therefore, no such development costs were incurred during the nine months ended September 30, 2013.

The following table summarizes our R&D expenses incurred for preclinical support, contract manufacturing of clinical supplies, clinical trial services provided by third parties and milestone payments for in-licensed technology for each of our product candidates for the three and nine months ended September 30, 2013 and 2012, as well as the cumulative amounts since we began development of each product candidate through September 30, 2013. The table also summarizes unallocated costs, which consist of personnel, facilities and other costs not directly allocable to development programs:

	Three Months	Ended September 30	Nine Months Ended September 30,		Cumulative
	Three World's Ended September 50,		TAILC MOILLIS L	amounts during	
	2013	2012	2013	2012	development
Onapristone	\$ 2,310,934	\$ 1,078,145	\$ 6,125,638	\$ 2,945,930	\$ 10,628,449
AR-42	42,538	220,241	299,398	813,282	5,282,607
AR-12	255,040	273,993	658,697	779,603	10,332,434
AR-67	32,129	81,908	56,789	369,735	8,139,424
Unallocated R&D	527,966	413,570	1,762,872	1,377,992	11,365,688
Total	\$ 3,168,607	\$ 2,067,857	\$ 8,903,394	\$ 6,286,542	\$ 45,748,602

Onapristone. We are currently developing onapristone, an anti-progestin hormone blocker that has been shown to have considerable anti-tumor activity in breast and endometrial cancer. On a pristone appears to have a unique ability to block the activated progesterone receptor and inhibit tumor growth. Onapristone was originally being developed by Schering AG for potential use as both a contraceptive and an anti-endocrine treatment of breast cancer. In clinical studies, onapristone has demonstrated a 56% objective response rate as a first line "hormone" treatment of breast cancer. Onapristone is an anti-progestin hormone blocker that has been shown to have anti-tumor activity in patients with breast cancer. In prior clinical studies, onapristone has demonstrated a 56% objective response rate as a first line "hormone" treatment of breast cancer. In connection with the development of onapristone, we have engaged Leica Biosystems and Clarient Diagnostic Services, Inc. to perform a feasibility study leading to the development of a immunohistochemistry based diagnostic test to selectively identify patients who express the activated form of the progesterone receptor and therefore may be more likely to benefit from treatment with onapristone and to perform the interpretation/analysis of tumor samples with the developed diagnostic test. We completed initial pre-clinical toxicology studies enabling the submission of an Investigational Medicinal Product Dossier ("IMPD"), the foreign equivalent of an investigational new drug application ("IND") in the second quarter of 2013 to support a pharmacokinetic/food effect study. The IMPD was accepted on July 31, 2013. The study subject accrual and analysis of the pharmacokinetic/food effect study has been completed. We submitted an IMPD to support the conduct of a phase I study in patients with progesterone receptor expressing cancers in the third quarter of 2013. We have completed manufacturing activities of onapristone Phase I study supplies and plan on initiating a Phase I study in patients with progesterone receptor positive carcinomas during the fourth quarter of 2013. We are also investigating onapristone as a potential treatment for patients with prostate cancer and has begun pre-clinical toxicology studies to enable the submission of an IMPD or IND during the fourth quarter of 2013 with the intent of conducting a Phase I clinical study in adult male subjects with castrate resistant prostate cancer during the first quarter of 2014. Based on our current development plans for onapristone, we anticipate spending approximately \$8.9 million on external development costs during the fiscal year 2013.

AR-42. We are also developing AR-42, an orally available, broad spectrum inhibitor of both histone and non-histone deacetylation proteins. AR-42 is currently being studied in an investigator sponsored Phase I/IIa clinical study in adult patients with relapsed or refractory multiple myeloma, chronic lymphocytic leukemia or lymphoma and a separate cohort of patients with solid tumors. In preclinical studies, AR-42 has demonstrated greater potency and activity in solid and liquid tumors when compared to vorinostat (also known as SAHA and marketed as Zolinza [®] by Merck). These data demonstrate the potent and differentiating activity of AR-42. Additionally, pre-clinical findings presented at the 2009 American Society of Hematology Annual Meeting and Exposition showed that AR-42 potently and selectively inhibits leukemic stem cells in acute myeloid leukemia. We are also supporting an investigator initiated Phase I study of AR-42 in combination with decitabine in patients with hematological malignancies that was initiated during the third quarter of 2013. In addition, preclinical models have demonstrated anti-tumor activity in tumor types (schwannoma and meningioma) that are associated with the genetic illness, neurofibromatosis type 2 (NF2). During the first quarter of 2013, the last study subject completed the planned dose-escalation phase of the study. Based on our current development plans for AR-42, we anticipate spending approximately \$0.4 million on external development costs during the fiscal year 2013.

AR-12. We are also developing AR-12 as a potentially first-in-class, orally available, targeted anti-cancer agent that has been shown in pre-clinical studies to inhibit phosphoinositide dependent protein kinase-1, or PDK-1, a protein in the PI3K/Akt pathway, and may also cause cell death through the induction of endoplasmic reticulum stress. In May 2009, the FDA accepted our investigational new drug application, or IND, for AR-12. We are currently conducting a

multi-centered Phase I clinical study of AR-12 in adult patients with advanced or recurrent solid tumors or lymphoma. The Phase I study of AR-12 was originally designed to be conducted in two parts. The first part is a dose-escalating study, which we refer to as the Escalation Phase, primarily designed to evaluate the compound's safety in order to identify the maximum tolerated dose, or MTD, or a recommended Phase II dose, or RP2D, for future studies of AR-12. We have completed the dose escalation phase of the Phase I trial, and have determined the RP2D and MTD of the current AR-12 formulation. Following the Escalation Phase, we planned to initiate the second part of the study, which we refer to as the Expansion Phase, which would have involved enrolling an expanded cohort of additional patients at the RP2D in multiple tumor types in order to further evaluate and confirm the pharmacodynamics, or PD, effects, potential anti-tumor activity, and safety of AR-12 at the MTD or RP2D in specific patient populations. We will not be moving forward with the Expansion Phase of this study as a novel and improved formulation that has shown to increase the bioavailability in preclinical models has been developed. During the first quarter 2013, the last study subject completed the planned dose-escalation phase of the study. Based on our current development plans for AR-12, we anticipate spending approximately \$0.8 million on external development costs during the fiscal year 2013.

Our expenditures on current and future clinical development programs are expected to be substantial and to increase particularly in relation to our available capital resources. However, these planned expenditures are subject to many uncertainties, including the results of clinical trials and whether we develop any of our drug candidates with a partner or independently. As a result of such uncertainties, it is very difficult to accurately predict the duration and completion costs of our research and development projects or whether, when and to what extent we will generate revenues from the commercialization and sale of any of our product candidates. The duration and cost of clinical trials may vary significantly over the life of a project as a result of unanticipated events arising during clinical development and a variety of factors, including:

- ·the number of trials and studies in a clinical program;
- ·the number of patients who participate in the trials;
- ·the number of sites included in the trials;
- ·the rates of patient recruitment and enrollment;
- ·the duration of patient treatment and follow-up;
- ·the costs of manufacturing our drug candidates; and
- ·the costs, requirements, timing of, and ability to secure regulatory approvals.

Interest Income. Interest income for the three months ended September 30, 2013 and 2012 was \$1,362 and \$658 respectively. The increase in interest income compared to the same period in 2012 is primarily due to higher average cash balances held during 2013 compared to the same period of 2012, as a result of our fourth quarter 2012 convertible debenture financing proceeds.

Interest income for the nine months ended September 30, 2013 and 2012 was \$8,353 and \$5,898 respectively. The increase in interest income compared to the same period in 2012 is primarily due to higher average cash balances held during 2013 compared to the same period of 2012, as a result of our fourth quarter 2012 convertible debenture financing proceeds.

Interest Expense. Interest expense for the three months ended September 30, 2013 and 2012 was approximately \$1.9 million and \$0, respectively. The increase in interest expense compared to the same period in 2012 is a result of interest charged on our approximately \$14.9 million fourth quarter 2012 convertible debenture financing and the related fees incurred completing the transaction, which are charged to interest expense over the expected term of the debentures.

Interest expense for the nine months ended September 30, 2013 and 2012 was approximately \$5.9 million and \$0, respectively. The increase in interest expense compared to the same period in 2012 is a result of interest charged on our approximately \$14.9 million fourth quarter 2012 convertible debenture financing and the related fees incurred completing the transaction, which are charged to interest expense over the expected term of the debentures.

In May 2013, we became aware that the investors in our 2012 offering of convertible debentures and warrants were entitled to additional liquidated damages in the amount of \$288,674, which amount should have been accrued in 2012 as part of the debt issuance. We determined that the impact of not reflecting this in 2012 was not material to the 2012 financial statements and instead reflected this as interest expense in the first quarter of 2013. This expense resulted in the issuance on May 27, 2013, of approximately 120,280 additional shares to the investors in lieu of an aggregate cash payment of \$288,674, representing the third and final installment of liquidated damages under the Registration Rights Agreement dated November 26, 2012, as amended, between us and the investors. As such, the amount of the expense was a non-cash charge.

Other Income (Expense). Other income for the three months ended September 30, 2013 was approximately \$2.0 million compared to other expense of approximately \$0.4 million for the three months ended September 30, 2012. During the three months ended September 30, 2013, there was a decrease of approximately \$2.0 million to our derivative liabilities as a result of adjustments to our valuation model. The valuation model reflects updated assumptions based on the timing and terms of our projected financing needs, including the probability of the October financing and future financings. During the three months ended September 30, 2012, there was an increase to our derivative liabilities of approximately \$0.4 million driven by an increased volatility assumption in the warrant valuation model during the third quarter of 2012.

Other income for the nine months ended September 30, 2013 was approximately \$1.0 million compared to other income of approximately \$2.1 million for the nine months ended September 30, 2012. During the nine months ended September 30, 2013, there was a decrease of approximately \$1.0 million to our derivative liabilities as a result of adjustments to our valuation model. The valuation model reflects updated assumptions based on the timing and terms of our projected financing needs, including the probability of the October financing and future financings. During the nine months ended September 30, 2012, there was a decrease to our derivative liabilities of approximately \$2.1 million driven by a decrease in the trading price of our stock price during the period.

Year Ended December 31, 2012 and December 31, 2011

General and Administrative Expenses. G&A expenses for the years ended December 31, 2012 and 2011 were approximately \$2.3 million and \$2.0 million, respectively. This increase of approximately \$0.3 million over 2011 is primarily attributable to an increase of approximately \$0.3 million in personnel costs, including bonus compensation expense related to having a full-time CEO and executive assistant for all of 2012. No paid employees held these positions for a portion of 2011 until the hiring of a full-time CEO in April 2011 and an executive assistant in June 2011.

Research and Development Expenses. R&D expenses for the years ended December 31, 2012 and 2011 were approximately \$8.5 million and \$5.7 million, respectively. The increase of approximately \$2.8 million over 2011 is primarily due to an increase of approximately \$4.4 million relating to our new product candidate, onapristone, which was in-licensed during the first quarter of 2012 and on which we spent less than \$0.1 million during 2011 in connection with pre-licensure due diligence activities. During 2012, we spent approximately \$4.5 million on onapristone, including approximately \$1.5 million on manufacturing, approximately \$1.1 million on pre-clinical activities, including a companion diagnostic, approximately \$1.1 million on consulting services relating to regulatory, manufacture and preclinical activities, a one-time \$0.5 million license fee and approximately \$0.3 million in travel and patent prosecution costs.

Offsetting the costs of onapristone development, we had a decrease of approximately \$1.0 million relating to our AR-12 program, driven primarily by a decrease of \$1.1 million in manufacturing expenses due to our development of an improved formulation during 2011, with no such activities in 2012. Additionally, we had a decrease in unallocated R&D expenses of approximately \$0.4 million primarily due to decreased consulting costs from having fewer consultants during the year ended December 31, 2012 as compared to the year ended December 31, 2011.

The following table summarizes our R&D expenses incurred for preclinical support, contract manufacturing of clinical supplies, clinical trial services provided by third parties and milestone payments for in-licensed technology for each of our product candidates for the years ended December 31, 2012 and 2011, as well as the cumulative amounts since we began development of each product candidate through December 31, 2012. The table also summarizes unallocated costs, which consist of personnel, facilities and other costs not directly allocable to development programs:

			Cumulative
	Year Ended	amounts during	
	2012	2011	development
Onapristone	\$4,476,393	\$26,418	\$ 4,502,811
AR-42	951,732	1,035,642	4,983,209
AR-12	830,849	1,860,377	9,673,737
AR-67	417,418	554,220	8,082,635
Unallocated R&D	1,860,738	2,214,179	9,602,816
Total	\$8,537,130	\$5,690,836	\$ 36,845,208

Interest Income. Interest income for the years ended December 31, 2012 and 2011 was \$7,849 and \$28,711. The decrease in interest income over 2011 is due to lower average cash balance levels during 2012 as compared to 2011.

Interest Expense. Interest expense for the years ended December 31, 2012 and 2011 was \$6,361,029 and \$0. This increase in interest expense over 2011 is due to our 2012 convertible debenture financing and the related derivatives issued. During 2011, we had no interest bearing obligations.

Other Income (Expense). For the year ended December 31, 2012, we had other income of approximately \$2.8 million, which was related to noncash adjustments to the derivative liability. The significant decrease in the liability was primarily due to the short remaining term of the underlying warrants. For the year ended December 31, 2011, we had other expense of approximately \$0.3 million, most of which related to noncash adjustments to the warrant liability.

Liquidity and Capital Resources

The following table summarizes our liquidity and capital resources as of September 30, 2013 and December 31, 2012 and our net changes in cash and cash equivalents for the nine months ended September 30, 2013 and 2012 (the amounts stated are expressed in thousands):

	September 30,	December 31,
Liquidity and capital resources	2013	2012
Cash and cash equivalents	\$ 1,541	\$ 10,943
Working Capital (deficit)	\$ (1,774)	\$ 7,901
Stockholders' (deficit) equity	\$ (26,330)	\$ (12,266)

	Nine Months Ended September 30,			
Cash flow data	2013		2012	
Cash used in:				
Operating activities	\$ (9,381)	\$ (6,085)
Investing activities	-		-	
Financing activities	(22)	-	
Net decrease in cash and cash equivalents	\$ (9,403)	\$ (6,085)

Our total cash resources as of September 30, 2013 were approximately \$1.5 million compared to approximately \$10.9 million as of December 31, 2012. As of September 30, 2013, we had approximately \$29.3 million in liabilities (of which approximately \$25.1 million represented convertible debentures and non-cash derivative liabilities), and an approximately \$1.8 million net working capital deficit. We incurred a net loss of approximately \$15.9 million and had negative cash flow from operating activities of \$9.4 million for the nine months ended September 30, 2013. Since August 1, 2005 (inception) through September 30, 2013, we have incurred an aggregate net loss of approximately \$65.8 million, while negative cash flow from operating activities has amounted to \$47.5 million. As we continue to develop our product candidates, we expect to continue to incur substantial and increasing losses, which will continue to generate negative net cash flows from operating activities as we expand our technology portfolio and engage in further research and development activities, particularly the conducting of pre-clinical studies and clinical trials.

On October 29, 2013, we entered into a Securities Purchase Agreement with certain purchasers identified therein pursuant to which we sold and the purchasers purchased, an aggregate of 12,868,585 units of our securities, referred to as the Units, with each Unit consisting of the following:

either (a) one share of common stock, or (b) a five-year common stock warrant to purchase one share of common stock at an exercise price of \$0.01 per share, referred to as the Series C Warrants;

a five-year warrant to purchase one share of common stock at an exercise price of \$4.00 per share, referred to as the Series D Warrants; and

a warrant, expiring on October 31, 2014, to purchase one share of common stock at an exercise price of \$2.40 per share, referred to as the Series E Warrants.

We sold and issued 8,413,354 Units consisting of shares of common stock, Series D Warrants and Series E Warrants at a purchase price of \$2.40 per Unit, and 4,455,231 Units consisting of Series C Warrants, Series D Warrants and Series E Warrants at a purchase price of \$2.39 per Unit, for total gross proceeds to us of \$30.84 million, before deducting fees and other transaction related expenses of approximately \$750,000.

From inception through the date of this prospectus, we have financed our operations through private sales of our equity and debt securities. As we have not generated any revenue from operations to date, and we do not expect to generate revenue for several years, if ever, we will need to raise substantial additional capital in order to continue to fund our research and development, including our long-term plans for clinical trials and new product development, as well as to fund operations generally. We may seek to raise additional funds through various potential sources, such as equity and debt financings, or through strategic collaborations and license agreements. We can give no assurances that we will be able to secure such additional sources of funds to support our operations, or if such funds are available to us, that such additional financing will be sufficient to meet our needs.

Based on our current development plans and including the proceeds from our 2013 Offering, we believe our existing cash resources are sufficient to fund our operations through approximately the first quarter of 2015. However, based on the various options for future clinical studies of onapristone, AR-42 and AR-12, our projected cash needs are difficult to predict. In addition, there are other factors which may also cause our actual cash requirements to vary materially, including changes in the focus and direction of our research and development programs; the acquisition and pursuit of development of new product candidates; competitive and technical advances; costs of commercializing any of the product candidates; and costs of filing, prosecuting, defending and enforcing any patent claims and any other intellectual property rights. If we are unable to raise additional funds when needed, we may not be able to continue development and regulatory approval of our products, and we could be required to delay, scale back or eliminate some or all our research and development programs and we may need to wind down our operations altogether. Each of these alternatives would likely have a material adverse effect on our business and may result in a loss of your entire investment in our common stock.

The actual amount of funds we will need to operate is subject to many factors, some of which are beyond our control. These factors include the following:

·the progress of our research activities;
·the costs of hiring additional full-time personnel;
·the number and scope of our research programs;
·the progress of our pre-clinical and clinical development activities;
·the costs and timing of manufacturing our drug candidates;
the progress of the development efforts of parties with whom we have entered into research and development agreements;
our ability to maintain current research and development programs and to establish new research and development and licensing arrangements; and
the cost involved in prosecuting and enforcing patent claims and other intellectual property rights; and the cost and timing of regulatory approvals.
We have based our estimates on assumptions that may prove to be wrong. We may need to obtain additional funds sooner than planned or in greater amounts than we currently anticipate.
License Agreement Commitments
Onapristone License Agreement

agreement, we hold an exclusive, royalty-bearing license for the rights to commercialize onapristone for all therapeutic uses. The license agreement provides us with worldwide commercial rights to onapristone with the exception of France, although under the license agreement we have an option to acquire French commercial rights from Invivis by providing notice to Invivis and making a cash payment.

Our rights to onapristone are governed by a license agreement with Invivis dated February 13, 2012. Under this

The onapristone license agreement provides us with exclusive, worldwide rights to a U.S. provisional patent application that relates to assays for predictive biomarkers for anti-progestin efficacy. We intend to expand our patent portfolio by filing additional patent applications covering the use and manufacture of onapristone and/or a companion diagnostic product. If the pending patent application issues, the issued patent would be scheduled to expire in 2031.

We made a one-time cash payment of \$500,000 to Invivis upon execution of the license agreement on February 13, 2012. Additionally, Invivis will receive performance-based cash payments of up to an aggregate of \$15.1 million upon successful completion of clinical and regulatory milestones relating to onapristone, which milestones include the marketing approval of onapristone in multiple indications in the United States or the European Union as well as Japan. The first milestone was due upon the dosing of the first patient in a pharmacokinetic study and was achieved during August 2013 pursuant to which we made a \$150,000 payment to Invivis during October 2013. We will make our next milestone payment to Invivis upon the dosing of the first subject in the first Company-sponsored Phase I clinical trial of onapristone, which is anticipated in the fourth quarter 2013. In addition, we will pay Invivis low single digit sales royalties based on net sales of onapristone by us or any of our sublicensees. Pursuant to a separate services agreement, Invivis will provide us with certain clinical development support services, which includes the assignment of up to two full-time employees to perform such services, in exchange for a monthly cash payment.

Under the license agreement with Invivis, we also agreed to indemnify and hold Invivis and its affiliates harmless from any and all claims arising out of or in connection with the production, manufacture, sale, use, lease, consumption or advertisement of onapristone, provided, however, that we shall have no obligation to indemnify Invivis for claims that (a) any patent rights infringe third party intellectual property, (b) arise out of the gross negligence or willful misconduct of Invivis, or (c) result from a breach of any representation, warranty confidentiality obligation of Invivis under the license agreement. The license agreement will terminate upon the later of (i) the last to expire valid claim contained in the patent rights, and (ii) February 13, 2032. In general, Invivis may terminate the license agreement at any time upon a material breach by us to the extent we fail to cure any such breach within 90 days after receiving notice of such breach or in the event we file for bankruptcy. We may terminate the agreement for any reason upon 90 days' prior written notice.

AR-12 and AR-42 License Agreements

Our rights to AR-12 and AR-42 are governed by separate license agreements with The Ohio State University Research Foundation, or Ohio State, entered into in January 2008. Pursuant to each of these agreements, we have exclusive, worldwide, royalty-bearing licenses for the rights to commercialize technologies embodied by certain issued patents, patent applications, know-how and improvements relating to AR-12 and AR-42 for all therapeutic uses.

Our rights to AR-12 and AR-42 are governed by separate license agreements with The Ohio State University Research Foundation, or Ohio State, entered into in January 2008. Pursuant to each of these agreements, we have exclusive, worldwide, royalty-bearing licenses for the rights to commercialize technologies embodied by certain issued patents, patent applications, know-how and improvements relating to AR-12 and AR-42 for all therapeutic uses.

Under our license agreement for AR-42, we have exclusive, worldwide rights to two pending U.S. patent applications that relate to AR-42 and particular uses of AR-42 according to our business plan. If either or both of the pending patent applications issue, the issued patent or patents would both be scheduled to expire in 2024. In addition, in 2010, we filed one U.S. provisional patent application directed primarily to particular methods of using AR-42. If any U.S. patent claiming priority to the provisional patent applications issues, such a patent would be scheduled to expire in 2031.

In 2008, pursuant to our license agreements for AR-12 and AR-42, we made one-time cash payments to Ohio State in the aggregate amount of \$450,000 and reimbursed it for past patent expenses. Additionally, we are required to make performance-based cash payments upon successful completion of clinical and regulatory milestones relating to AR-12 and AR-42 in the U.S., Europe and Japan. The license agreements for AR-12 and AR-42 provide for aggregate potential milestone payments of up to \$6.1 million for AR-12, of which \$5.0 million is due only after marketing approval in the United States, Europe and Japan, and \$5.1 million for AR-42, of which \$4.0 million is due only after marketing approval in the United States, Europe and Japan. In September 2009, we paid Ohio State a milestone payment upon the commencement of the Phase I clinical study of AR-12. The first milestone payment for AR-42 will be due when the first patient is dosed in the first Company-sponsored Phase I clinical trial, which is not expected to occur in 2013. Pursuant to the license agreements for AR-12 and AR-42, we must pay Ohio State royalties on net sales of licensed products at rates in the low-single digits. To the extent we enter into a sublicensing agreement relating to either or both of AR-12 or AR-42, we will be required to pay Ohio State a portion of all non-royalty income received from such sublicensee.

The license agreements with Ohio State further provide that we will indemnify Ohio State from any and all claims arising out of the death of or injury to any person or persons or out of any damage to property, or resulting from the production, manufacture, sale, use, lease, consumption or advertisement of either AR-12 or AR-42, except to the extent that any such claim arises out of the gross negligence or willful misconduct of Ohio State. The license agreements for AR-12 and AR-42, respectively, expire on the later of (i) the expiration of the last valid claim

contained in any licensed patent and (ii) 20 years after the effective date of the license. Ohio State will generally be able to terminate either license upon our breach of the terms of the license to the extent we fail to cure any such breach within 90 days after receiving notice of such breach or our bankruptcy. We may terminate either license upon 90 days' prior written notice.

AR-67 License Agreement

We formerly held exclusive rights to develop and commercialize an oncology therapeutic drug candidate known as AR-67 pursuant to an October 2006 license agreement with the University of Pittsburgh ("Pitt"). In the first quarter of 2012, we determined to cease development of AR-67 and agreed with Pitt to terminate the license agreement. As a result, we no longer have rights in AR-67; however, we retain ownership of all data accumulated during our development of AR-67.

On January 12, 2012, we received a notice from Pitt, demanding payment of \$250,000 in satisfaction of an annual license fee owed under the license agreement and providing us with 60 days' notice to remedy the default. As of December 31, 2012, we had accrued for the outstanding annual license fee of \$250,000. On March 28, 2013, we and Pitt agreed to a settlement of Pitt's outstanding claim against us for the \$250,000 annual license fee in exchange for our payment of \$235,000 in full satisfaction of all remaining obligations under the license agreement, which payment was made April 2, 2013.

Off -Balance Sheet Arrangements

There were no off-balance sheet arrangements as of September 30, 2013.

Critical Accounting Policies and Estimates

Our financial statements are prepared in accordance with generally accepted accounting principles. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosures. We evaluate our estimates and assumptions on an ongoing basis, including research and development and clinical trial accruals, and stock-based compensation estimates. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates. We believe the following critical accounting policies reflect the more significant judgments and estimates used in the preparation of our financial statements and accompanying notes.

Research and Development Expenses and Accruals

R&D expenses consist primarily of salaries and related personnel costs, fees paid to consultants and outside service providers for pre-clinical, clinical, and manufacturing development, legal expenses resulting from intellectual property prosecution, costs related to obtaining and maintaining our product licenses, contractual review, and other expenses relating to the design, development, testing, and enhancement of our product candidates. Amounts due under such arrangements may be either fixed fee or fee for service, and may include upfront payments, monthly payments, and payments upon the completion of milestones or receipt of deliverables.

Our cost accruals for clinical trials and other R&D activities are based on estimates of the services received and efforts expended pursuant to contracts with numerous clinical trial centers and clinical research organizations, or CROs, clinical study sites, laboratories, consultants, or other clinical trial vendors that perform the activities. Related contracts vary significantly in length, and may be for a fixed amount, a variable amount based on actual costs incurred, capped at a certain limit, or for a combination of these elements. Activity levels are monitored through close communication with the CROs and other clinical trial vendors, including detailed invoice and task completion review, analysis of expenses against budgeted amounts, analysis of work performed against approved contract budgets and payment schedules, and recognition of any changes in scope of the services to be performed. Certain CROs and significant clinical trial vendors provide an estimate of costs incurred but not invoiced at the end of each quarter for each individual trial. The estimates are reviewed and discussed with the CRO or vendor as necessary, and are included in R&D expenses for the related period. For clinical study sites, which are paid periodically on a per-subject basis to the institutions performing the clinical study, we accrue an estimated amount based on subject screening and enrollment in each quarter. All estimates may differ significantly from the actual amount subsequently invoiced, which may occur several months after the related services were performed.

In the normal course of business we contract with third parties to perform various R&D activities in the on-going development of our product candidates. The financial terms of these agreements are subject to negotiation and vary from contract to contract and may result in uneven payment flows. Payments under the contracts depend on factors

such as the achievement of certain events, the successful enrollment of patients, and the completion of portions of the clinical trial or similar conditions. The objective of our accrual policy is to match the recording of expenses in our financial statements to the actual services received and efforts expended. As such, expense accruals related to clinical trials and other R&D activities are recognized based on our estimate of the degree of completion of the event or events specified in the specific contract.

No adjustments for material changes in estimates have been recognized in any period presented.

Stock-Based Compensation

Our results include non-cash compensation expense as a result of the issuance of stock, stock options and warrants. We have issued stock options to employees, directors, consultants and Scientific Advisory Board members under our 2005 Stock Option Plan, as amended.

We expense the fair value of employee stock-based compensation over the vesting period. When more precise pricing data is unavailable, we determine the fair value of stock options using the Black-Scholes option-pricing model. This valuation model requires us to make assumptions and judgments about the variables used in the calculation. These variables and assumptions include the weighted-average period of time that the options granted are expected to be outstanding, the volatility of our common stock, the risk-free interest rate and the estimated rate of forfeitures of unvested stock options.

Stock options or other equity instruments to non-employees (including consultants and all members of our Scientific Advisory Board) issued as consideration for goods or services received by us are accounted for based on the fair value of the equity instruments issued (unless the fair value of the consideration received can be more reliably measured). The fair value of stock options is determined using the Black-Scholes option-pricing model. The fair value of any options issued to non-employees is recorded as expense over the applicable service periods.

During the period in which our common stock was registered under the Securities Exchange Act and publicly traded (October 3, 2008 through May 5, 2009), our management used the following assumptions: On the option grant date, the current available quoted market price for determining the fair value of our common stock, an expected volatility based on the average expected volatilities of a sampling of five companies with similar attributes to us, including industry, stage of life cycle, size and financial leverage, an expected dividend rate of 0% based on management plan of operations, a risk free interest rate based on the current U.S. Treasury 5-year Treasury Bill and an expected forfeiture rate of 0%.

Subsequent to the deregistration of our common stock in May 2009, for all options granted in 2009, management estimated the fair value of our common stock to be \$8.00 based on the following factors. The stock was publicly trading at \$8.00 per share prior to being deregistered. Subsequent to the deregistration, we did not experience any significant events including clinical trial results, new product acquisitions or discoveries which management believes would influence a material change in share price following the deregistration. In addition, our management used the following assumptions for options granted during this period: An expected volatility based on the average expected volatilities of a sampling of five companies with similar attributes to us, including industry, stage of life cycle, size and financial leverage, an expected dividend rate of 0% based on management plan of operations, a risk free interest rate based on the current U.S. Treasury 5-year Treasury Bill and an expected forfeiture rate of 0%.

On February 9, 2011, the effective date of the registration statement filed in connection with our September 2010 private placement of Series A Preferred Stock, we again became subject to the reporting requirements of the Exchange Act. Due to the lack of an active public market for our common stock, management estimated the fair value of our common stock using a Monte Carlo simulation model and, in doing so, utilized a third-party valuation report. The Monte Carlo simulation is a generally accepted statistical method used to generate a defined number of stock price paths in order to develop a reasonable estimate of the range of our future expected stock prices and minimizes standard error. Management used this valuation for options granted in 2011 and during the nine months ended September 30, 2013 (no stock options were granted during the year ended December 31, 2012). In addition, our management used the following assumptions for options granted during this period: An expected volatility based on the average expected volatilities of a sampling of five companies with similar attributes to us, including industry, stage of life cycle, size and financial leverage, an expected dividend rate of 0% based on management plan of operations, a risk free interest rate based on the current U.S. Treasury 5-year Treasury Bill and an expected forfeiture rate of 0%.

The terms and vesting schedules for share-based awards vary by type of grant and the employment status of the grantee. Generally, the awards vest based upon time-based or performance-based conditions. Performance-based conditions generally include the attainment of goals related to our financial and development performance. Stock-based compensation expense is included in the respective categories of expense in the Statements of Operations. We expect to record additional non-cash compensation expense in the future, which may be significant.

Convertible Debentures and Warrant Liability

We account for the warrants issued in connection with the 2013 private placement, for the convertible debentures and warrants issued in connection with the 2012 private placement and for the warrants issued in connection with the 2010 private placement in accordance with the guidance on Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity, which provides that we classify the warrant instrument as a liability at its fair value and adjusts the instrument to fair value at each reporting period. This liability is subject to re-measurement at each balance sheet date until exercised, and any change in fair value is recognized as a component of other income or expense. The fair value of warrants issued by us, in connection with private placements of securities, has been estimated using a Monte Carlo simulation model. The Monte Carlo simulation is a generally accepted statistical method used to generate a defined number of stock price paths in order to develop a reasonable estimate of the range of our future expected stock prices and minimizes standard error.

OUR BUSINESS

Overview

We are a development stage company focused on developing innovative products for the treatment of cancer. The following table summarizes our product development pipeline:

Product	T 1: 4:	Commercial		
Candidate	Indications	Rights	Ongoing Studies / Status	
Onapristone	Endometrial, breast and prostate cancers	Arno	Manufacture of drug substance and drug product is currently underway. Pre-clinical enabling toxicology studies were completed during the second and fourth quarter of 2013. Arno sponsored Phase I study in patients with progesterone receptor positive carcinomas initiated during the fourth quarter of 2013. Work is ongoing on a companion diagnostic intended to enhance selection of patients most likely to benefit from treatment with onapristone. We are also investigating onapristone as a potential treatment for patients with prostate cancer and have submitted an IMPD in the fourth quarter of 2013 with the intent of initiating a Phase I clinical study in adult male subjects with castrate resistant prostate cancer during the first quarter of 2014.	
AR-42	Hematological malignancies and solid tumors	Arno	An investigator-initiated Phase I/IIa clinical study of AR-42 is ongoing at The James Cancer Center at The Ohio State University in in adult subjects with relapsed or refractory multiple myeloma, chronic lymphocytic leukemia, or CLL, or lymphoma. The protocol has been amended to include a solid tumor dose escalation cohort which has completed accrual to the dose escalation phase and is being amended to include additional patients with solid tumors at the recommended phase 2 dose. We are also supporting an investigator initiated Phase I study of AR-42 in combination with decitabine in patients with hematological malignancies that was initiated in the third quarter of 2013.	
AR-12	Solid tumors and hematological malignancies	Arno	A multi-centered Phase I clinical study of AR-12 in adult subjects with advanced or recurrent solid tumors or lymphoma has been completed. During the first quarter of 2013, the last study subject completed the study.	

Corporate History; Merger Transactions

On June 2, 2008, we were acquired by Laurier International, Inc., a Delaware corporation, in a "reverse" merger whereby a wholly-owned subsidiary of Laurier merged with and into Arno Therapeutics, with Arno Therapeutics remaining as the surviving corporation and a wholly-owned subsidiary of Laurier. In accordance with the terms of this merger, stockholders of Arno Therapeutics exchanged all of their shares of common stock of Arno Therapeutics for shares of Laurier common stock at a rate of approximately 0.25 shares of Laurier common stock for each share of Arno Therapeutics common stock. As a result of the issuance of the shares of Laurier common stock to the former Arno Therapeutics stockholders, following the merger the former stockholders of Arno Therapeutics held 95 percent of the outstanding common stock of Laurier, assuming the issuance of all shares underlying outstanding options and warrants. Upon completion of the merger, all of the former officers and directors of Laurier resigned and were replaced by the officers and directors of Arno Therapeutics. Additionally, following the merger Laurier changed its name to Arno Therapeutics, Inc.

Oncology Overview

According to the American Cancer Society, cancer is the second leading cause of death in the United States, surpassed only by heart disease, accounting for nearly one of every four deaths. According to the American Cancer Society, more than 1.6 million new cancer cases are expected to be diagnosed in 2013. According to a 2013 report by the American Cancer Society, the National Institutes of Health estimated direct costs for medical care for cancer related treatments in the United States in 2008 were \$77.4 billion. With a 68% 5-year relative survival rate for all cancers from 2002-2008, according to the American Cancer Society, oncology remains a significant unmet medical need.

Pharmaceutical treatments are widely used to treat patients with cancer and are often used alongside surgery or radiation. Different types of cancers respond in unique ways to different drugs, and some tumors may not respond at all to particular therapies. In many cases, these treatments extend life by slowing the progression of the disease but become less effective over time as the cancer cells become resistant to a given therapy or a class of compounds with a particular mechanism of action. For this reason, there is a need to develop new agents, particularly those with novel mechanisms that can be added to the current arsenal of treatment options.

Many types of drugs are presently used to treat cancer, including cytotoxics, targeted agents, hormones, and biologics. According to a February 2012 report by Cowen & Co., the global cancer market was approximately \$73.5 billion in 2011, of which cytotoxics accounted for \$22.5 billion and targeted agents accounted for \$33.2 billion.

Cytotoxics interfere with essential cellular processes in order to kill rapidly dividing cells, an effective approach for destroying cancer cells that remains prevalent despite the fact that these compounds can have significant side effects, particularly in rapidly dividing normal tissues such as those found in bone marrow and the gastrointestinal tract. By contrast, targeted agents attack cellular processes that are more prevalent in cancer cells than in normal tissues, and thus aim to simultaneously reduce side effects and improve efficacy.

Although there are many agents available to treat cancer, a number of factors contribute to determining which particular agent is administered to a patient. There is a considerable amount of overlap in the mechanisms of action of approved therapies, and in many cases, multiple drugs in a class are approved and in clinical use. The choice of a particular agent or class of agents is generally based on the results of empirical clinical trials in specific cancer indications, and a desire to treat the disease aggressively is balanced with considerations for the patient's tolerance of the treatment and quality of life. These considerations highlight the need to develop therapies that not only improve anti-cancer efficacy but also improve patient convenience and reduce side effects.

Product Development Pipeline

Onapristone

Overview

Pursuant to a February 2012 license agreement with Invivis Pharmaceuticals, Inc., or Invivis, we have the exclusive rights worldwide to develop and (other than in France) commercialize onapristone, an anti-progestin hormone blocker that has been shown to have considerable anti-tumor activity in patients with breast cancer. Onapristone appears to have a unique ability to block the activation of the progesterone receptor, which is believed to be the mechanism by which it may inhibit the growth of breast, endometrial and other tumors. Onapristone was originally being developed by Schering AG for potential use in the treatment of benign gynecological disorders (uterine leiomyoma, endometriosis), as a contraceptive and an anti-endocrine treatment of breast cancer. In previous published clinical studies, onapristone has demonstrated a 56% objective response rate as a first line "hormone" treatment of breast cancer. In connection with the development of onapristone, we intend to develop a companion diagnostic to identify patient's tumors which express the activated form of the progesterone receptor and therefore may have an enhanced likelihood to benefit from treatment with onapristone.

The hormones estrogen and progesterone play important roles in normal female reproductive physiology and the development of certain tissues/organs including the breast and uterus. These two naturally occurring hormones are believed to play important roles in the development of certain female cancers (breast and endometrial) and the biologic effects of these two hormones make the estrogen and progesterone receptors important therapeutic targets. For example, chronic estrogen exposure unopposed by progesterone predisposes women to endometrial cancer, and the presence of estrogen or progesterone receptors in breast cancer tissues is predictive of response to anti-estrogen targeted therapies. Breast and endometrial cancers commonly express estrogen and progesterone receptors, but to date, it has not been determined whether these receptors are functional and play a role in tumor growth. Prostate cancers also express the progesterone receptor which may play a role in the development of androgen resistance. We believe a better diagnostic test may aide in selecting patients who are most likely to benefit from "hormone" treatments, including onapristone.

Onapristone is a type 1 anti-progestin. Researchers believe its mechanism of action is thought to be a direct result of binding to the progesterone receptor and preventing the binding of the progesterone receptor to DNA, thereby substantially reducing or eliminating progesterone receptor induced gene transcription resulting in death of the malignant cell.

Potential Advantages

In prior publications, onapristone was reported to have a 56% objective response rate in patients with breast cancer as a first line endocrine treatment and a 49% clinical benefit rate in patients with breast cancer with tamoxifen resistant disease. Our planned clinical studies of onapristone are intended to evaluate safety and efficacy which may provide women with breast and endometrial cancer, and men with castrate resistant prostate cancer an additional treatment option and allow a delay in the time for which patients may need chemotherapy treatment.

Development Plans and Activities

We recently completed a series of preclinical studies of onapristone. In these studies, 10 different breast cancer and endometrial cancer cell lines where characterized for hormone receptor status and the effect of various hormones and growth factors on proliferation and progesterone receptor status. When evaluating the effect of onapristone in the various culture conditions tested, cancer cell lines that expressed the activated form of the progesterone receptor, or APR, were found to respond to treatment with onapristone, but cell lines that did not express APR did not respond to onapristone treatment. We presented these findings in November 2012 at the 24th European Organization for Research and Treatment of Cancer symposium on Molecular Targets and Cancer Therapeutics in Dublin, Ireland and the April 2013 meeting of the American Association for Cancer Research in Washington, D.C.

In addition, as stated above, a key aspect of our strategy to develop onapristone is to also develop a companion diagnostic that would identify patient's tumors that express APR and therefore would be more likely to respond to treatment with onapristone. We and our research collaborators recently identified a immunohistochemistry technique for identifying activated progesterone receptors in breast cancer tumors, the initial findings were presented in December 2012 at the 35th Annual San Antonio Breast Cancer Symposium, with more mature data presented at the June 2013 annual meeting of the American Society of Clinical Oncology in Chicago, and in December 2013 at the 36th Annual San Antonio Breast Cancer Symposium. This IHC technique was successful in identifying the activated form of the progesterone receptor via nuclear morphology, which we believe can be done on a routine basis with freshly obtained or formalin-fixed and paraffin-embedded tissue. We are further refining and testing this method on a larger cohort of breast and endometrial cancer samples, with correlation to other standard tumor markers and clinical outcomes. We are also evaluating this diagnostic technique in other malignancies.

We completed initial pre-clinical toxicology studies enabling the submission of an Investigational Medicinal Product Dossier, or IMPD, the foreign equivalent of an investigational new drug application, or IND, in the second quarter of 2013 to support a pharmacokinetic/food effect study. The IMPD was accepted on July 31, 2013. The study subject accrual and analysis of the pharmacokinetic/food effect study has been completed. We submitted an IMPD to support the conduct of a Phase I study in patients with progesterone receptor expressing cancers during the third quarter of 2013. We have completed manufacturing activities of onapristone Phase I study supplies and initiated the Phase I study in patients with progesterone receptor positive carcinomas during the fourth quarter of 2013. We are also investigating onapristone as a potential treatment for patients with prostate cancer and submitted an IMPD during the fourth quarter of 2013 with the intent of initiating a Phase I clinical study in adult male subjects with castrate resistant prostate cancer during the first quarter of 2014.

AR-42

Pursuant to a license agreement with The Ohio State University, or Ohio State, we also have exclusive rights to develop and commercialize AR-42, a novel oral cancer therapy currently in early clinical development. AR-42 is a broad spectrum deacetylase inhibitor of both histone and non-histone proteins, which has demonstrated greater potency and activity in solid tumors and hematological malignancies when compared in preclinical studies to vorinostat (also known as "SAHA" or Zolin®, the first of only two marketed compound in the class. AR-42 may possess additional histone-independent mechanisms, which may contribute to its superior profile *in vitro* and *in vivo*. An investigator-initiated Phase I/IIa trial of AR-42 in patients with hematological malignancies and solid tumors is ongoing at Ohio State.

Background of HDAC Inhibitors

Histones are proteins that play an important role in the regulation of genes. Histone modification is a key regulator of gene expression, and improper histone acetylation is among the modifications that are linked to expression of a cancerous phenotype. These changes can lead to improper cell growth resulting from altering the expression of important genes involved in cell cycle progression, proliferation, and survival. Histone deacetylases, or HDACs, are a class of enzymes that participate in this form of regulation and have been linked to both solid and hematologic malignancies and thus represent a target for cancer therapy.

HDAC inhibitors are an emerging class of drug compounds that have demonstrated efficacy primarily in hematological malignancies, also called blood cancers, but are currently being developed in solid tumors as well. It is believed that HDAC inhibitors induce histone hyperacetylation and can cause cell death. The first drug in this class to gain approval is SAHA, which is approved to treat cutaneous T-cell lymphoma, or CTCL, in patients that have failed two previous therapies. Another HDAC inhibitor, romidepsin (Istodax®, Celgene Corporation) is approved to treat CTCL and peripheral T-cell lymphoma. These two compounds and other HDACs are currently in late stage development for both hematological malignancies as well as solid tumors. In preclinical studies, AR-42 has demonstrated activity against a broad spectrum of deacetylase targets and increased potency compared to SAHA.

Potential Advantages of AR-42

AR-42 is a broad spectrum inhibitor of histone and non-histone deacetylase targets that we believe may have advantages over currently approved HDAC inhibitors, including SAHA. As a result, many of our preclinical data compare AR-42 to SAHA. In preclinical models, AR-42 has shown to be more potent or effective than SAHA in various cancer types, including chronic lymphocyte leukemia, or CLL, B-cell lymphoma, prostate and ovarian cancers. Further, preclinical studies suggest that AR-42 has anti-cancer activities that are independent of histone acetylation and include Akt dephosphorylation, Bcl-xL and survivin suppression, and Ku70 acetylation, all of which disrupt the growth and proliferation of cancer cells. We believe that this combination of activity and potency could make AR-42 a more effective treatment for hematological malignancies than currently available HDAC inhibitors and a potential treatment of a number of solid tumors. In addition, pre-clinical models have demonstrated anti-tumor activity in tumor types (schwannoma and meningioma) that are associated with the genetic illness neurofibromatosis type 2 (NF2).

In addition to its broad activity against hematological malignancies, pre-clinical data presented at the 2009 American Society of Hematology Annual Meeting showed that AR-42 potently and selectively inhibits leukemic stem cells in acute myeloid leukemia.

Clinical Development

We are collaborating with Ohio State, which is conducting an investigator-initiated Phase I/IIa study of AR-42 in patients with advanced or recurrent hematological malignancies for which prior treatments have been ineffective. The primary goal is to evaluate the safety and tolerability of AR-42 given orally three times per week. Secondary endpoints include characterizing AR-42's pharmacokinetics and its pharmacodynamic profile through the measurement of biomarkers and evaluation of clinical response. The recommended dose for further study in patients with hematological malignancies and solid tumors has been declared.

In addition, in February 2012, the FDA granted orphan drug designation for AR-42 for the treatment of meningioma and schwannoma of the central nervous system. Meningioma and schwannoma are rare, benign tumors that can present in different locations within the brain and the spinal cord and may cause substantial morbidity for those affected individuals. The primary treatment option for patients with these tumors is surgical excision. In preclinical studies, AR-42 has demonstrated anti-tumor activity in both meningioma and schwannoma. We believe AR-42 may provide a complement to surgery, particularly in cases where the location of the tumor within the brain or spinal cord precludes surgery. During 2012, we intend to collaborate with Ohio State to conduct a Phase 0 investigator-initiated study of AR-42 in patients with schwannoma and meningioma. The primary purpose of this study will be to assess intra-tumoral concentrations of AR-42, identify apoptosis markers and assess gene regulation.

AR-12

Overview

Pursuant to a license agreement with Ohio State, we have exclusive rights to develop and commercialize AR-12, a potentially first-in-class, orally available cancer treatment that is currently enrolling patients in a Phase I clinical study. AR-12 has been shown in pre-clinical studies to inhibit phosphoinositide dependent protein kinase-1, or PDK-1, that targets the Akt pathway, while also possessing activity in the endoplasmic reticulum stress pathway and other pathways targeting apoptosis. In pre-clinical studies, AR-12 has demonstrated activity in a wide range of tumor types and synergistic effects with several widely used anti-cancer agents, enhancing activity or overcoming drug-resistance when used in combination with Avastin® (Genentech), Herceptin® (Genentech), Gleevec® (Novartis), Tarceva® (Genentech) and tamoxifen. We are currently enrolling patients with advanced or recurrent solid tumors or lymphoma in a Phase I clinical study of AR-12.

Mechanism of Action

AR-12 has been shown in pre-clinical studies to inhibit a protein known as PDK-1, a novel target in an important cell growth and proliferation pathway, which has been validated by the approval of therapeutics that target proteins both upstream and downstream of PDK-1. Receptor tyrosine kinases, or RTK, are cell-surface receptors that are involved in cell growth and are upstream of PDK-1. Members of the RTK class are targeted by some of the most successful and widely used targeted oncology agents, including Avastin® (Genentech), Herceptin® (Genentech), Gleevec® (Novartis), Tarceva® (Genentech), Iressa® (AstraZeneca), Nexavar® (Bayer/Onyx) and tamoxifen. Downstream of PDK-1 is the mammalian target of rapamycin, or mTOR protein. The mTOR inhibitors temsirolimus (Torisel®, Wyeth) and everolimus (Afinitor®, Novartis) are FDA approved for the treatment of renal cancer, and additional studies are being conducted with mTOR inhibitors in various clinical trials as anti-cancer agents.

Although FDA-approved drugs that target the Akt pathway have shown efficacy in treating cancer, some tumors either do not respond to these drugs or eventually become resistant to therapy. Scientists hypothesize that a combination of drugs that inhibit different targets in this pathway could provide synergistic or additive benefits to increase efficacy and potentially overcome drug resistance. For this reason, there has been particular interest within the biopharmaceutical industry in developing inhibitors of PI3K, PDK-1, and Akt.

PDK-1 can transform normal human cells and may be involved in the invasion and metastasis process. PDK-1 and its downstream target, the protein Akt, are frequently activated in multiple cancer types, and inhibiting PDK-1 facilitates the dephosphorylation and subsequent inactivation of Akt. Activation of the PDK-1/Akt pathway confers resistance to cell death signaling and the apoptotic activity of other cytotoxic agents. Additionally, recent research has demonstrated the importance of PDK-1 in oncology that is independent of its Akt modulation. The inhibition of the PDK-1/Akt pathway in cancer cells where this pathway was previously active has been shown to decrease cell proliferation and increase programmed cell death, which is known as apoptosis. Preclinical data suggests that AR-12 inhibits PDK-1 and data collected from preclinical toxicology studies and tumor distribution studies indicate that AR-12 would be expected to exceed therapeutic concentrations *in vivo*.

AR-12 has also demonstrated an ability to induce the endoplasmic reticulum (ER) stress mediated apoptosis pathway, which contribute to its unique profile *in vitro* and *in vivo*. The ER stress pathway is a cellular mechanism that can either induce cellular protection or apoptosis. AR-12, through the induction of PKR-like Endoplasmic Reticulum Kinase, or PERK, seems to selectively induce the pro-apoptotic response and appears to have a preferential effect on cancer cells.

Potential Advantages of AR-12

We believe AR-12's unique mechanisms and ability to improve the efficacy of other approved agents may enable it to become a first-in-class agent with broad applications in oncology and significant sales in the market. In preclinical studies, AR-12 has shown efficacy in a wide range of tumor types, including breast, lung, prostate, pancreatic, brain, and hematological cancers, as both a single-agent as well as in combination with leading oncology therapeutics. AR-12 demonstrated synergy or additive benefit or overcame drug-resistance when used in combination with Avastin®, Herceptin®, Gleevec®, Tarceva®, Iressa®, Nexavar® and tamoxifen, all of which are widely-prescribed, FDA-approved oncology therapeutics that, according to Thomson Reuters Pharma, represented approximately \$17 billion in sales in 2009.

We believe AR-12 is a potentially first-in-class molecule in human clinical development. We also believe that PDK-1 may prove to be highly desirable target for oncology; therapeutic strategies to modulate the Akt pathway are of great scientific, clinical, and financial interest, and there are a few molecules in development that seek to target Akt through the inhibition of a protein known as PI3K. PDK-1 is downstream of PI3K and thus may be more likely to impact the desired molecular targets further downstream and less likely to result in off-target toxicity. Inhibition of PDK-1 also seems to be able to regulate other important oncology targets that are not be mediated by PI3K. In addition to targeting PDK-1, we believe that AR-12 also has the ability to induce ER stress and has the potential to become an important agent in a range of cancer indications.

Clinical Development

We completed study subject enrollment in a multi-site Phase I clinical trial of AR-12 in patients with solid tumors or lymphomas who have progressed despite treatment with other therapies. Subjects in this Phase I study receive an oral daily dose of AR-12. The Phase I study was conducted at three clinical sites, including The Ohio State University (Columbus, Ohio), Scottsdale Healthcare (Phoenix, Arizona), and The Royal Marsden Hospital (London, UK).

The Phase I study of AR-12 was originally designed to be conducted in two parts. The first part is a dose-escalating study, which we refer to as the Escalation Phase, that is primarily designed to evaluate the safety of AR-12 and to identify the maximum tolerated dose, or MTD, or a recommended Phase II dose, or RP2D, for future clinical studies of AR-12. The study is also designed to utilize biomarkers and functional imaging to examine the pharmacodynamic effects of AR-12 in modulating certain targets within the PI3K pathway. Secondary objectives for the Escalation Phase include characterizing the pharmacokinetics of AR-12 (i.e., how AR-12 is absorbed and eliminated in and from the body) and measuring tumor response. We have determined the RP2D and MTD of the current AR-12 formulation. Following the Escalation Phase, we planned to initiate the second part of the study, which we refer to as the Expansion Phase, which would have involved enrolling an expanded cohort of additional patients at the RP2D in multiple tumor types. We will not be moving forward with the Expansion Phase of this study as we plan to conduct further clinical development of AR-12 with an improved formulation, which has been shown to substantially increase the bioavailability in preclinical models.

The biomarker selection and evaluation is being led by Johann de Bono, M.D., Ph.D. of The Royal Marsden Hospital in London. Dr. de Bono is a prominent researcher in oncology drug development and has been involved in the successful development of novel targeted therapies.

We believe that the data generated from the current Phase I study has provided important information to direct future studies, in terms of safety, pharmacokinetics and potential efficacy. We also believe that the biomarkers and pharmacodynamic assays generated in the Phase I study may provide deeper understanding of the molecular actions of AR-12 and validate the preclinical hypothesis about AR-12's activity in a clinical setting. The information generated in these studies will also help to guide the potential future development of AR-12.

Competition

We compete primarily in the cancer therapeutic segment of the biopharmaceutical market that addresses cancer therapeutics, which is highly competitive. We face significant competition from many pharmaceutical, biopharmaceutical and biotechnology companies that are researching and selling products designed to address the cancer market. Many of our competitors have significantly greater financial, manufacturing, marketing and drug development resources than we do. Large pharmaceutical companies in particular have extensive experience in clinical testing and in obtaining regulatory approvals for drugs. These companies also have significantly greater research capabilities than we do. In addition, many universities and private and public research institutes are active in cancer research. We also compete with commercial biotechnology companies for the rights to product candidates developed by public and private research institutes. Smaller or early-stage companies are also significant competitors, particularly those with collaborative arrangements with large and established companies. In addition to the factors described above under "Risk Factors," our ability to compete in the cancer therapeutics market depends on the following factors:

- our ability to develop novel compounds with attractive pharmaceutical properties and to secure and protect intellectual property rights based on our innovations;
- ·the efficacy, safety and reliability of our drug candidates;
- ·the speed at which we develop our drug candidates;
- ·our ability to design and successfully complete appropriate clinical trials;
- ·our ability to maintain a good relationship with regulatory authorities;
- ·the timing and scope of regulatory approvals;
- ·our ability to manufacture and sell commercial quantities of future products to the market; and
- •acceptance of future products by physicians and other healthcare providers.

Onapristone

If approved, onapristone would compete with other classes of oncology drugs referred to as "hormonal" agents (antiestrogens, aromatase inhibitors, megestrol acetate) used in the treatment of breast and endometrial cancers. Antiestrogens, aromatase inhibitors, and megestrol acetate have been used for a number of decades and the medical community is aware and accepting of their safety and efficacy profile. Many of these agents are off patent and thus available at a low cost. In addition, combination chemotherapy is routinely used after patients with breast and endometrial cancer have failed standard hormonal treatments, and thus onapristone may be positioned as an agent which delays the need for chemotherapy.

Although onapristone has a known risk for elevated liver function tests, we believe that onapristone's historical therapeutic profile will allow it to compete successfully in the crowded space of breast cancer treatments and, potentially, as an effective treatment for women with endometrial carcinoma.

AR-42

If approved, AR-42 would compete with other HDAC inhibitors. HDAC inhibitors have displayed efficacy in a broad range of settings as single agents and in combination with other therapeutics. The first HDAC inhibitor to obtain approval is vorinostat ("SAHA," or Zolin®), which is approved for the treatment of recurrent cutaneous T-cell lymphoma ("CTCL"). Additionally, in November 2009 Gloucester Pharmaceuticals received FDA approval for its novel HDAC inhibitor, romidepsin, to treat CTCL before being acquired by Celgene Corp. in December 2009. Subsequently, romidepsin (Istodax®, Celgene Corporation) has been approved for the treatment of patients with peripheral T-cell lymphoma. Other HDAC inhibitors are in Phase II and Phase III trials, primarily in hematological malignancies, but also in solid tumors as both single agents and in combination with other oncology therapies.

We believe that AR-42 has a therapeutic profile that will allow it to compete successfully in the crowded class of what are broadly known as HDAC inhibitors. AR-42 is a pan-DAC inhibitor that has demonstrated preclinical activity that compares favorably with SAHA, as well as potentially differentiating activity and the ability to target cancer stem cells. Additionally, based on AR-42's preclinical toxicology package and dosing schedule, we believe that there is a relatively low risk of cardiac toxicity or fatigue. We also believe that AR-42's potential to selectively target leukemic stem cells in AML may sufficiently differentiate AR-42 from other agents in the class to become an important member of the emerging class of deacetylase inhibitors.

AR-12

AR-12 is believed to target PDK-1, which is in the PI3K/Akt pathway. Targeting the PI3K/Akt pathway has been of great interest to the pharmaceutical industry, particularly compounds that target PI3K. The approaches for targeting PI3K are general inhibition or the specific inhibition of the alpha, beta, gamma, or delta subunit of this kinase. Some of these molecules also combine PI3K inhibition with activity against the mammalian target of rapamycin ("mTOR"), a target that is believed to also play a role in the PI3K/Akt pathway. Other approaches to this pathway include targeting Akt directly. Additionally, companies such as Wyeth, Vernalis, GlaxoSmithKline, and Novartis have published data on their preclinical discovery programs to target PDK-1.

Compounds that inhibit PI3K have been the foundation of several recent licensing, acquisition, and financing activities. Despite the great deal of activity in the space, we believe that AR-12 can differentiate itself and become an important agent in the treatment of cancer. In multiple preclinical studies, AR-12 has demonstrated the ability to inhibit PDK-1 as well as induce ER stress, a combination that could provide a unique therapeutic profile and differentiate AR-12 from other molecules being developed to inhibit the PI3K/Akt pathway.

License Agreements and Intellectual Property

General

Our goal is to obtain, maintain and enforce patent protection for our products, formulations, processes, methods and other proprietary technologies, preserve our trade secrets, and operate without infringing on the proprietary rights of other parties, both in the United States and in other countries. Our policy is to actively seek to obtain, where appropriate, the broadest intellectual property protection possible for our current product candidates and any future product candidates, proprietary information and proprietary technology through a combination of contractual arrangements and patents, both in the U.S. and abroad. However, even patent protection may not always afford us with complete protection against competitors who seek to circumvent our patents. If we fail to adequately protect or enforce our intellectual property rights or secure rights to patents of others, the value of our intellectual property rights would diminish. See "Risk Factors – Risks Related to Our Intellectual Property."

We will continue to depend upon the skills, knowledge and experience of our scientific and technical personnel, as well as that of our advisors, consultants and other contractors, none of which is patentable. To help protect our proprietary know-how, which is not patentable, and for inventions for which patents may be difficult to enforce, we currently rely and will in the future rely on trade secret protection and confidentiality agreements to protect our interests. To this end, we require all of our employees, consultants, advisors and other contractors to enter into confidentiality agreements that prohibit the disclosure of confidential information and, where applicable, require disclosure and assignment to us of the ideas, developments, discoveries and inventions important to our business.

Onapristone License Agreement

Our rights to onapristone are governed by a license agreement with Invivis dated February 13, 2012. Under this agreement, we hold an exclusive, royalty-bearing license for the rights to commercialize onapristone for all therapeutic uses. The license agreement provides us with worldwide rights to onapristone with the exception of France, although under the license agreement we have an option to acquire French commercial rights from Invivis by providing notice to Invivis and making a cash payment.

The onapristone license agreement provides us with exclusive, worldwide rights to a U.S. provisional patent application that relates to assays for predictive biomarkers for anti-progestin efficacy. We intend to expand our patent portfolio by filing additional patent applications covering the use and manufacture of onapristone and/or a companion diagnostic product. If the pending patent application issues, the issued patent would be scheduled to expire in 2031.

We made a one-time cash payment of \$500,000 to Invivis upon execution of the license agreement on February 13, 2012. Additionally, Invivis will receive performance-based cash payments of up to an aggregate of \$15.1 million upon successful completion of clinical and regulatory milestones relating to onapristone, which milestones include the marketing approval of onapristone in multiple indications in the United States or the European Union as well as Japan. We will make the first milestone payment to Invivis upon the dosing of the first subject in the first Company-sponsored Phase I clinical trial of onapristone, which is anticipated to occur in the second half of 2013. In addition, we will pay Invivis low single digit sales royalties based on net sales of onapristone by us or any of our sublicensees. Pursuant to a separate services agreement, Invivis will provide us with certain clinical development support services, which includes the assignment of up to two full-time employees to perform such services, in exchange for a monthly cash payment.

Under the license agreement with Invivis, we also agreed to indemnify and hold Invivis and its affiliates harmless from any and all claims arising out of or in connection with the production, manufacture, sale, use, lease, consumption or advertisement of onapristone, provided, however, that we shall have no obligation to indemnify Invivis for claims that (a) any patent rights infringe third party intellectual property, (b) arise out of the gross negligence or willful misconduct of Invivis, or (c) result from a breach of any representation, warranty confidentiality obligation of Invivis under the license agreement. The license agreement will terminate upon the later of (i) the last to expire valid claim contained in the patent rights, and (ii) February 13, 2032. In general, Invivis may terminate the license agreement at any time upon a material breach by us to the extent we fail to cure any such breach within 90 days after receiving notice of such breach or in the event we file for bankruptcy. We may terminate the agreement for any reason upon 90 days' prior written notice.

AR-12 and AR-42 License Agreements

Our rights to AR-12 and AR-42 are governed by separate license agreements with The Ohio State University Research Foundation, or Ohio State, entered into in January 2008. Pursuant to each of these agreements, we have exclusive, worldwide, royalty-bearing licenses for the rights to commercialize technologies embodied by certain issued patents, patent applications, know-how and improvements relating to AR-12 and AR-42 for all therapeutic uses.

Under our license agreement for AR-12, we have exclusive, worldwide rights to one issued U.S. patent and four pending U.S. patent applications that relate to AR-12 and particular uses of AR-12 according to our business plan. The issued patent includes composition of matter claims. The issued patent is currently scheduled to expire in 2024. If the pending patent applications issue, the latest of the issued patent or patents would be scheduled to expire in 2028.

Under our license agreement for AR-42, we have exclusive, worldwide rights to two pending U.S. patent applications that relate to AR-42 and particular uses of AR-42 according to our business plan. If either or both of the pending patent applications issue, the issued patent or patents would both be scheduled to expire in 2024. In addition, in 2010, we filed one U.S. provisional patent application directed primarily to particular methods of using AR-42. If any U.S. patent claiming priority to the provisional patent applications issues, such a patent would be scheduled to expire in 2031.

In 2008, pursuant to our license agreements for AR-12 and AR-42, we made one-time cash payments to Ohio State in the aggregate amount of \$450,000 and reimbursed it for past patent expenses. Additionally, we are required to make performance-based cash payments upon successful completion of clinical and regulatory milestones relating to AR-12 and AR-42 in the U.S., Europe and Japan. The license agreements for AR-12 and AR-42 provide for aggregate potential milestone payments of up to \$6.1 million for AR-12, of which \$5.0 million is due only after marketing approval in the United States, Europe and Japan, and \$5.1 million for AR-42, of which \$4.0 million is due only after marketing approval in the United States, Europe and Japan. In September 2009, we paid Ohio State a milestone payment upon the commencement of the Phase I clinical study of AR-12. The first milestone payment for AR-42 will be due when the first patient is dosed in the first Company-sponsored Phase I clinical trial, which is not expected to occur in 2013. Pursuant to the license agreements for AR-12 and AR-42, we must pay Ohio State royalties on net sales of licensed products at rates in the low-single digits. To the extent we enter into a sublicensing agreement relating to either or both of AR-12 or AR-42, we will be required to pay Ohio State a portion of all non-royalty income received from such sublicensee.

The license agreements with Ohio State further provide that we will indemnify Ohio State from any and all claims arising out of the death of or injury to any person or persons or out of any damage to property, or resulting from the production, manufacture, sale, use, lease, consumption or advertisement of either AR-12 or AR-42, except to the extent that any such claim arises out of the gross negligence or willful misconduct of Ohio State. The license agreements for AR-12 and AR-42, respectively, expire on the later of (i) the expiration of the last valid claim contained in any licensed patent and (ii) 20 years after the effective date of the license. Ohio State will generally be able to terminate either license upon our breach of the terms of the license the extent we fail to cure any such breach within 90 days after receiving notice of such breach or our bankruptcy. We may terminate either license upon 90 days' prior written notice.

AR-67 License Agreement

We formerly held exclusive rights to develop and commercialize an oncology therapeutic drug candidate known as AR-67 pursuant to an October 2006 license agreement with the University of Pittsburgh ("Pitt"). Under this agreement, Pitt granted us an exclusive, worldwide, royalty-bearing license for the rights to commercialize technologies embodied by certain issued patents, patent applications and know-how relating to AR-67 for all therapeutic uses. In the first quarter of 2012, we determined to cease development of AR-67 and agreed with Pitt to terminate the license agreement. As a result, we no longer have rights in AR-67; however, we retain ownership of all data accumulated during our development of AR-67.

Government Regulation and Product Approval

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the testing (pre-clinical and clinical), manufacturing, labeling, storage, recordkeeping, advertising, promotion, import, export, marketing and distribution, among other things, of drugs and drug product candidates. If we do not comply with applicable requirements, we may be fined, the regulatory agencies may refuse to approve our marketing applications or allow us to manufacture or market our products, and we may be criminally prosecuted. We and our manufacturers may also be subject to regulations under other United States federal, state, and local laws.

United States Government Regulation

In the United States, the FDA regulates drugs under the Food, Drug and Cosmetic Act, or FDCA, and implementing regulations. The process required by the FDA before our drug candidates may be marketed in the United States generally involves the following (although the FDA is given wide discretion to impose different or more stringent requirements on a case-by-case basis):

- completion of extensive pre-clinical laboratory tests, pre-clinical animal studies and formulation studies, all performed in accordance with the FDA's good laboratory practice regulations and other regulations;
- ·submission to the FDA of an IND application, which must become effective before clinical trials may begin; performance of multiple adequate and well-controlled clinical trials meeting FDA requirements to establish the safety and efficacy of the product candidate for each proposed indication;
- · submission of a new drug application, or NDA, to the FDA;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities at which the product
- ·candidate is produced, and potentially other involved facilities as well, to assess compliance with current good manufacturing practice, or cGMP, regulations and other applicable regulations; and
- ·FDA review and approval of the NDA prior to any commercial marketing, sale or shipment of the drug.

The testing and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for our drug candidates will be granted on a timely basis, if at all. Risks to us related to these regulations are described above under the caption entitled "Risk Factors – Risks Relating to the Clinical Testing, Regulatory Approval, Manufacturing and Commercialization of Our Product Candidates."

Pre-clinical tests may include laboratory evaluation of product chemistry, formulation and stability, as well as studies to evaluate toxicity and other effects in animals. The results of pre-clinical tests, together with manufacturing information and analytical data, among other information, are submitted to the FDA as part of an IND application. Subject to certain exceptions, an IND becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, issues a clinical hold to delay a proposed clinical investigation due to concerns or questions about the conduct of the clinical trial, including concerns that human research subjects will be exposed to unreasonable health risks. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Our submission of an IND, or those of our collaboration partners, may not result in the FDA authorization to commence a clinical trial. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development. The FDA must also approve changes to an existing IND. Further, an independent institutional review board, or IRB, for each medical center proposing to conduct the clinical trial must review and approve the plan for any clinical trial before it commences at that center and it must monitor the study until completed. The FDA, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk. Clinical testing also must satisfy extensive Good Clinical Practice requirements and regulations for informed consent.

Clinical Trials

For purposes of NDA submission and approval, clinical trials are typically conducted in the following three sequential phases, which may overlap (although additional or different trials may be required by the FDA as well):

Phase I clinical trials are initially conducted in a limited population to test the drug candidate for safety, dose tolerance, absorption, metabolism, distribution and excretion in healthy humans or, on occasion, in patients, such as cancer patients. In some cases, particularly in cancer trials, a sponsor may decide to conduct what is referred to as a "Phase Ib" evaluation, which is a second safety-focused Phase I clinical trial typically designed to evaluate the impact of the drug candidate in combination with currently FDA-approved drugs or in a particular patient population.

Phase II clinical trials are generally conducted in a limited patient population to identify possible adverse effects and safety risks, to determine the efficacy of the drug candidate for specific targeted indications and to determine dose tolerance and optimal dosage. Multiple Phase II clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more expensive Phase III clinical trials. In some cases, a sponsor may decide to conduct what is referred to as a "Phase IIb" evaluation, which is a second, confirmatory Phase II clinical trial that could, if accepted by the FDA, serve as a pivotal clinical trial in the approval of a drug candidate.

Phase III clinical trials are commonly referred to as pivotal trials. When Phase II clinical trials demonstrate that a dose range of the drug candidate is effective and has an acceptable safety profile, Phase III clinical trials are undertaken in large patient populations to further evaluate dosage, to provide substantial evidence of clinical efficacy and to further test for safety in an expanded and diverse patient population at multiple, geographically dispersed clinical trial sites.

In some cases, the FDA may condition continued approval of an NDA on the sponsor's agreement to conduct additional clinical trials with due diligence. In other cases, the sponsor and the FDA may agree that additional safety and/or efficacy data should be provided; however, continued approval of the NDA may not always depend on timely submission of such information. Such post-approval studies are typically referred to as Phase IV studies.

New Drug Application

The results of drug candidate development, pre-clinical testing and clinical trials, together with, among other things, detailed information on the manufacture and composition of the product and proposed labeling, and the payment of a user fee, are submitted to the FDA as part of an NDA. The FDA reviews all NDAs submitted before it accepts them for filing and may request additional information rather than accepting an NDA for filing. Once an NDA is accepted for filing, the FDA begins an in-depth review of the application.

During its review of an NDA, the FDA may refer the application to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA may refuse to approve an NDA and issue a "not approvable" letter if the applicable regulatory criteria are not satisfied, or it may require additional clinical or other data, including one or more additional pivotal Phase III clinical trials. Even if such data are submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data from clinical trials are not always conclusive and the FDA may interpret data differently than we or our collaboration partners interpret data. If the FDA's evaluations of the NDA and the clinical and manufacturing procedures and facilities are favorable, the FDA may issue either an approval letter or an approvable letter, which contains the conditions that must be met in order to secure final approval of the NDA. If and when those conditions have been met to the FDA's satisfaction, the FDA will issue an approval letter, authorizing commercial marketing of the drug for certain indications. The FDA may withdraw drug approval if ongoing regulatory requirements are not met or if safety problems occur after the drug reaches the market. In addition, the FDA may require testing, including Phase IV clinical trials, and surveillance programs to monitor the effect of approved products that have been commercialized, and the FDA has the power to prevent or limit further marketing of a drug based on the results of these post-marketing programs. Drugs may be marketed only for the FDA-approved indications and in accordance with the FDA-approved label. Further, if there are any modifications to the drug, including changes in indications, other labeling changes, or manufacturing processes or facilities, we may be required to submit and obtain FDA approval of a new NDA or NDA supplement, which may require us to develop additional data or conduct additional pre-clinical studies and clinical trials.

The Hatch-Waxman Act

Under the Hatch-Waxman Act, newly-approved drugs and new conditions of use may benefit from a statutory period of non-patent marketing exclusivity. The Hatch-Waxman Act provides five-year marketing exclusivity to the first applicant to gain approval of an NDA for a new chemical entity, meaning that the FDA has not previously approved any other new drug containing the same active entity. The Hatch-Waxman Act prohibits the submission of an abbreviated NDA, or ANDA, or a Section 505(b)(2) NDA for another version of such drug during the five-year exclusive period; however, submission of a Section 505(b)(2) NDA or an ANDA for a generic version of a previously-approved drug containing a paragraph IV certification is permitted after four years, which may trigger a 30-month stay of approval of the ANDA or Section 505(b)(2) NDA. Protection under the Hatch-Waxman Act does not prevent the submission or approval of another "full" 505(b)(1) NDA; however, the applicant would be required to conduct its own pre-clinical and adequate and well-controlled clinical trials to demonstrate safety and effectiveness. The Hatch-Waxman Act also provides three years of marketing exclusivity for the approval of new and supplemental NDAs, including Section 505(b)(2) NDAs, for, among other things, new indications, dosages, or strengths of an existing drug, if new clinical investigations that were conducted or sponsored by the applicant are essential to the approval of the application. Some of our product candidates may qualify for Hatch-Waxman non-patent marketing exclusivity.

In addition to non-patent marketing exclusivity, the Hatch-Waxman Act amended the FDCA to require each NDA sponsor to submit with its application information on any patent that claims the drug for which the applicant submitted the NDA or that claims a method of using such drug and with respect to which a claim of patent infringement could reasonably be asserted if a person not licensed by the owner engaged in the manufacture, use, or sale of the drug. Generic applicants that wish to rely on the approval of a drug listed in the Orange Book must certify to each listed patent, as discussed above. We intend to submit for Orange Book listing all relevant patents for our product candidates.

Finally, the Hatch-Waxman Act amended the patent laws so that certain patents related to products regulated by the FDA are eligible for a patent term extension if patent life was lost during a period when the product was undergoing regulatory review, and if certain criteria are met. We intend to seek patent term extensions, provided our patents and products, if they are approved, meet applicable eligibility requirements.

Pediatric Studies and Exclusivity

The FDA provides an additional six months of non-patent marketing exclusivity and patent protection for any such protections listed in the Orange Book for new or marketed drugs if a sponsor conducts specific pediatric studies at the written request of the FDA. The Pediatric Research Equity Act of 2003, or PREA, authorizes the FDA to require pediatric studies for drugs to ensure the drugs' safety and efficacy in children. PREA requires that certain new NDAs or NDA supplements contain data assessing the safety and effectiveness for the claimed indication in all relevant

pediatric subpopulations. Dosing and administration must be supported for each pediatric subpopulation for which the drug is safe and effective. The FDA may also require this data for approved drugs that are used in pediatric patients for the labeled indication, or where there may be therapeutic benefits over existing products. The FDA may grant deferrals for submission of data, or full or partial waivers from PREA. PREA pediatric assessments may qualify for pediatric exclusivity. Unless otherwise required by regulation, PREA does not apply to any drug for an indication with orphan designation.

Orphan Drug Designation and Exclusivity

The FDA may grant orphan drug designation to drugs intended to treat a rare disease or condition, which generally is a disease or condition that affects fewer than 200,000 individuals in the United States. Orphan drug designation must be requested before submitting an NDA. If the FDA grants orphan drug designation, which it may not, the identity of the therapeutic agent and its potential orphan use are publicly disclosed by the FDA. Orphan drug designation does not convey an advantage in, or shorten the duration of, the review and approval process. If a product which has an orphan drug designation subsequently receives the first FDA approval for the indication for which it has such designation, the product is entitled to seven years of orphan drug exclusivity, meaning that the FDA may not approve any other applications to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity (superior efficacy, safety, or a major contribution to patient care). Orphan drug designation does not prevent competitors from developing or marketing different drugs for that indication. In February 2012, AR-42 received orphan-drug designation from the FDA for the treatment of meningioma and schwannoma of the central nervous system, which are benign tumors that can present in different locations within the brain and the spinal cord and may cause substantial morbidity for those affected individuals. Where appropriate, we will also seek orphan drug designation for our other product candidates, including potentially for certain uses of AR-12.

Under European Union medicines laws, the criteria for designating a product as an "orphan medicine" are similar but somewhat different from those in the United States. A drug is designated as an orphan drug if the sponsor can establish that the drug is intended for a life-threatening or chronically debilitating condition affecting no more than five in 10,000 persons in the European Union or that is unlikely to be profitable, and if there is no approved satisfactory treatment or if the drug would be a significant benefit to those persons with the condition. Orphan medicines are entitled to ten years of marketing exclusivity, except under certain limited circumstances comparable to United States law. During this period of marketing exclusivity, no "similar" product, whether or not supported by full safety and efficacy data, will be approved unless a second applicant can establish that its product is safer, more effective or otherwise clinically superior. This period may be reduced to six years if the conditions that originally justified orphan designation change or the sponsor makes excessive profits. On March 8, 2012 the European Medicines Agency, Committee on Orphan Medicinal Products (COMP) issued a positive opinion on the application for orphan designation of AR-42 for treatment of neurofibromatosis-type 2 disease complex.

Fast Track Designation

The FDA's fast track program is intended to facilitate the development and to expedite the review of drugs that are intended for the treatment of a serious or life-threatening condition and that demonstrate the potential to address unmet medical needs. Under the fast track program, applicants may seek traditional approval for a product based on data demonstrating an effect on a clinically meaningful endpoint, or approval based on a well-established surrogate endpoint. The sponsor of a new drug candidate may request the FDA to designate the drug candidate for a specific indication as a fast track drug at the time of original submission of its IND, or at any time thereafter prior to receiving marketing approval of a marketing application. The FDA will determine if the drug candidate qualifies for fast track designation within 60 days of receipt of the sponsor's request.

If the FDA grants fast track designation, it may initiate review of sections of an NDA before the application is complete. This so-called "rolling review" is available if the applicant provides and the FDA approves a schedule for the submission of the remaining information and the applicant has paid applicable user fees. The FDA's review clock for both a standard and priority NDA for a fast track product does not begin until the complete application is submitted. Additionally, fast track designation may be withdrawn by the FDA if it believes that the designation is no longer supported by emerging data, or if the designated drug development program is no longer being pursued.

In some cases, a fast track designated drug candidate may also qualify for one or more of the following programs:

• Priority Review. As explained above, a drug candidate may be eligible for a six-month priority review. The FDA assigns priority review status to an application if the drug candidate provides a significant improvement compared to marketed drugs in the treatment, diagnosis or prevention of a disease. A fast track drug would ordinarily meet the FDA's criteria for priority review, but may also be assigned a standard review. We do not know whether any of our drug candidates will be assigned priority review status or, if priority review status is assigned, whether that review or

approval will be faster than conventional FDA procedures, or that the FDA will ultimately approve the drug.

Accelerated Approval. Under the FDA's accelerated approval regulations, the FDA is authorized to approve drug candidates that have been studied for their safety and efficacy in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit to patients over existing treatments based upon either a surrogate endpoint that is reasonably likely to predict clinical benefit or on the basis of an effect on a clinical endpoint other than patient survival or irreversible morbidity. In clinical trials, surrogate endpoints are alternative measurements of the symptoms of a disease or condition that are substituted for measurements of observable clinical symptoms. A drug candidate approved on this basis is subject to rigorous post-marketing compliance requirements, including the completion of Phase IV or post-approval clinical trials to validate the surrogate endpoint or confirm the effect on the clinical endpoint. Failure to conduct required post-approval studies with due diligence, or to validate a surrogate endpoint or confirm a clinical benefit during post-marketing studies, may cause the FDA to seek to withdraw the drug from the market on an expedited basis. All promotional materials for drug candidates approved under accelerated regulations are subject to prior review by the FDA.

When appropriate, we and/or our collaboration partners intend to seek fast track designation, accelerated approval or priority review for our drug candidates. We cannot predict whether any of our drug candidates will obtain fast track, accelerated approval, or priority review designation, or the ultimate impact, if any, of these expedited review mechanisms on the timing or likelihood of the FDA approval of any of our drug candidates.

Satisfaction of the FDA regulations and approval requirements or similar requirements of foreign regulatory agencies typically takes several years, and the actual time required may vary substantially based upon the type, complexity and novelty of the product or disease. Typically, if a drug candidate is intended to treat a chronic disease, as is the case with some of the drug candidates we are developing, safety and efficacy data must be gathered over an extended period of time. Government regulation may delay or prevent marketing of drug candidates for a considerable period of time and impose costly procedures upon our activities. The FDA or any other regulatory agency may not grant approvals for changes in dosage form or new indications for our drug candidates on a timely basis, or at all. Even if a drug candidate receives regulatory approval, the approval may be significantly limited to specific disease states, patient populations and dosages. Further, even after regulatory approval is obtained, later discovery of previously unknown problems with a drug may result in restrictions on the drug or even complete withdrawal of the drug from the market. Delays in obtaining, or failures to obtain, regulatory approvals for any of our drug candidates would harm our business. In addition, we cannot predict what adverse governmental regulations may arise from future United States or foreign governmental action.

Special Protocol Assessment

The FDCA directs the FDA to meet with sponsors, pursuant to a sponsor's written request, for the purpose of reaching agreement on the design and size of clinical trials intended to form the primary basis of an efficacy claim in an NDA. If an agreement is reached, the FDA will reduce the agreement to writing and make it part of the administrative record. This agreement is called a special protocol assessment, or SPA. While the FDA's guidance on SPAs states that documented SPAs should be considered binding on the review division, the FDA has the latitude to change its assessment if certain exceptions apply. Exceptions include identification of a substantial scientific issue essential to safety or efficacy testing that later comes to light, a sponsor's failure to follow the protocol agreed upon, or the FDA's reliance on data, assumptions or information that are determined to be wrong.

Other Regulatory Requirements

Any drugs manufactured or distributed by us or our collaboration partners pursuant to future FDA approvals are subject to continuing regulation by the FDA, including recordkeeping requirements and reporting of adverse experiences associated with the drug. Drug manufacturers and their subcontractors are required to register with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including cGMP, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Failure to comply with the statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory action, such as warning letters, suspension of manufacturing, sales or use, seizure of product, injunctive action or possible civil penalties. We cannot be certain that we or our present or future third-party manufacturers or suppliers will be able to comply with the cGMP regulations and other ongoing FDA regulatory requirements. If our present or future third-party manufacturers or suppliers are not able to comply with these requirements, the FDA may halt our clinical trials, require us to recall a drug from distribution, or withdraw approval of the NDA for that drug.

The FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, off-label promotion, industry-sponsored scientific and educational activities and promotional activities involving the Internet. A company can make only those claims relating to safety and efficacy that are approved by the FDA. Failure to comply with these requirements can result in adverse publicity, warning and/or untitled letters, corrective advertising and potential civil and criminal penalties.

Foreign Regulation

In addition to regulations in the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we must obtain approval of a product by the comparable regulatory authorities of foreign countries before we can commence clinical trials or marketing of the product in those countries. The approval process varies from country to country, and the time may be longer or shorter than that required for FDA approval. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary greatly from country to country.

Under European Union regulatory systems, marketing authorizations may be submitted either under a centralized or mutual recognition procedure. The centralized procedure provides for the grant of a single marketing authorization that is valid for all European Union member states. The mutual recognition procedure provides for mutual recognition of national approval decisions. Under this procedure, the holder of a national marketing authorization may submit an application to the remaining member states. Within 90 days of receiving the applications and assessment report, each member state must decide whether to recognize approval.

In addition to regulations in Europe and the United States, we will be subject to a variety of foreign regulations governing clinical trials and commercial distribution of our future products.

Manufacturing

We do not currently have our own manufacturing facilities. We intend to continue to use our financial resources to accelerate development of our product candidates rather than diverting resources to establish our own manufacturing facilities. We meet our pre-clinical and clinical trial manufacturing requirements by establishing relationships with third-party manufacturers and other service providers to perform these services for us. We rely on individual proposals and purchase orders to meet our needs and typically rely on terms and conditions proposed by the third party or us to govern our rights and obligations under each order (including provisions with respect to intellectual property, if any). We do not have any long-term agreements or commitments for these services. Likewise, we do not have any long-term agreements or commitments to supply the underlying component materials of our product candidates, some of which are available from only a single supplier.

Should any of our product candidates obtain marketing approval, we anticipate establishing relationships with third-party manufacturers and other service providers in connection with the commercial production of our products. We have some flexibility in securing other manufacturers to produce our product candidates; however, our alternatives may be limited due to proprietary technologies or methods used in the manufacture of some of our product candidates.

Research and Development Expenses

We spent approximately \$8.5 million in fiscal year 2012 and \$5.7 million in fiscal year 2011 on research and development activities. These expenses include cash and non-cash expenses relating to the development of our clinical and pre-clinical programs.

Employees

As of January 27, 2014, we had seven full-time employees, none of whom are covered by a collective bargaining agreement. We believe our relations with our employees are satisfactory.

We retain several consultants who serve in various operational and administrative capacities, and we utilize clinical research organizations and third parties to perform our pre-clinical studies, clinical studies, and manufacturing. We may hire additional research and development staff, as required, to support our product development.

Legal Proceedings

We are not involved in any pending legal proceedings.

Description of Property

Our principal offices are located at 200 Route 31 North, Suite 104, Flemington, New Jersey 08822, where we occupy approximately 4,168 square feet of office space pursuant to the terms of a lease agreement dated August 4, 2011. The lease commencement date was November 17, 2011, with lease payments beginning in February 2012. The lease expiration date is three years from the rent commencement date. We provided a cash security deposit of \$10,455, or two months' base rent. We are also responsible for payment of our share of common area maintenance costs and taxes.

MANAGEMENT AND BOARD OF DIRECTORS

Directors and Executive Officers

The following table lists our executive officers, directors and key employees and their respective ages and positions as of the date of this prospectus:

Name	Age	Positions
Arie S. Belldegrun, M.D.	64	Chairman of the Board
Glenn Mattes	58	President, Chief Executive Officer and Director
Alexander Zukiwski, M.D.	56	Vice President, Chief Medical Officer
David M. Tanen	42	Secretary and Director
Scott L. Navins	43	Treasurer
Stefan Proniuk, Ph.D.	43	Vice President of Product Development
William F. Hamilton, Ph.D.	74	Director
Tomer Kariv	52	Director
Yacov Reizman	62	Director
Steven B. Ruchefsky	51	Director
Randy Thurman	64	Director

Arie S. Belldegrun, M.D., FACS has served as the chairman of Arno's board of directors since March 2008. He is currently the chairman of the managing member of Two River Consulting, LLC, an organization that provides management, consulting and operational services for development stage biotechnology companies, including Arno. See "Certain Relationships and Related Transactions." Dr. Belldegrun is Professor and Chief of Urologic Oncology at the David Geffen School of Medicine at the University of California, Los Angeles, where he holds the Carol and Roy Doumani Chair in Urologic Oncology. He received his medical degree at the Hebrew University Hadassah Medical School, and conducted his post-doctoral studies at the Weizmann Institute of Science in Israel. He completed his Urologic Surgery residency at Harvard Medical School in 1985 and his Surgical Oncology fellowship at the National Cancer Institute/National Institute of Health in 1988. He is certified by the American Board of Urology and is a Fellow of the American College of Surgeons and the American Association of Genitourinary Surgeons. Dr. Belldegrun is also the founder and founding chairman of Agensys Inc., a privately held biotechnology company developing fully human antibody cancer therapeutics based on novel and clinically relevant targets. In December 2007, Agensys was acquired by Astellas Pharma, Inc. in a deal valued at \$537 million. Dr. Belldegrun served as Vice-Chairman of the Board of Directors and Chairman of the Scientific Advisory Board of Cougar Biotechnology, an oncology-focused biopharmaceutical company, until its sale to Johnson & Johnson in July 2009. Since October 2009, Dr. Belldegrun has served as a director of Nile Therapeutics, Inc., a publicly-held company focused on the development of biopharmaceutical products for the treatment of cardiovascular diseases. He is also the Chairman of the Board of Directors of Kite Pharma, Inc., a privately held company focused on the development of immune-based targeted therapies to treat different cancer indications. Dr. Belldegrun is on the scientific boards of several biotechnology and pharmaceutical companies and is a reviewer for many medical journals and granting organizations. He served as Chairman of the Molecular and Biological Technology Committee of the American Urological

Association and member of its Technology Assessment Council, as a member of the Governor's council on Bioscience for the State of California, and as a biotechnology group leader and member of The Los Angeles Economy and Jobs Committee established in October 2006 by Mayor Antonio Villaraigosa. He is the author of several books on prostate and kidney cancers, holds several biopharmaceutical patents, and has written over 400 scientific publications with an emphasis on urologic oncology.

Glenn Mattes was appointed to serve as Arno's President, Chief Executive Officer, and director in April 2011. He has over 25 years of commercialization and general management experience across a wide range of businesses. From 2002 to 2011, Mr. Mattes served as the President of Tibotec Therapeutics, a Johnson & Johnson operating company focused on oncology and virology therapeutics, where he led the organization responsible for the development, marketing and sales of novel antiretroviral compounds in North America. Under Mr. Mattes' leadership, Tibotec successfully launched the first two Johnson & Johnson products in the United States' HIV/AIDS market. In 2008, Mr. Mattes was appointed to the President's Advisory Council on HIV/AIDS (PACHA) by the U.S. Secretary of Health and Human Services to counsel White House administrations on both domestic and global health and treatment issues. Prior to Tibotec, from 1998 to 2002 Mr. Mattes served as the Vice President of Worldwide Commercial Operations at Centocor, where he played a critical role in defining Centocor's overall business direction, as well as developing and implementing the organization's sales and marketing strategy leading to the introduction of Remicade®. Prior to joining Centocor, Mr. Mattes gained a wealth of pharmaceutical experience at Rhone Poulenc Rorer (RPR) (now Aventis), where he held positions of increasing responsibility, including President of RPR Canada, and Vice President of Advanced Therapeutics and Oncology, North America, where he was largely responsible for the successful launch of both Taxotere® and Lovenox®. Mr. Mattes received a BS degree from the City University of New York.

Alexander Zukiwski, M.D., was appointed to serve as Arno's Vice President and Chief Medical Officer in June 2011. Dr. Zukiwski has more than 15 years of experience in global oncology drug development and was most recently Executive Vice President, Clinical Research, and Chief Medical Officer at MedImmune, Inc. where he served until March 2011, leading the organization that was responsible for developing and implementing MedImmune's clinical research, medical affairs and safety strategies. From 2002 until he joined MedImmune in 2007, Dr. Zukiwski held medical affairs and clinical development positions of increasing responsibility at Johnson & Johnson Pharmaceutical Research & Development, LLC ("JJPRD"), Centocor and Ortho Biotech, all Johnson & Johnson companies, including serving as therapeutic area head for oncology and acting head of oncology research and development. As Vice President, Head of Clinical Oncology, he was responsible for strategic oversight and portfolio management of therapeutic oncology, hematology and supportive care clinical development programs for JJPRD and Centocor's oncology development group. Before joining Johnson & Johnson, Dr. Zukiwski held clinical oncology positions at Hoffmann-LaRoche, Glaxo Wellcome and Rhone- Poulenc Rorer. Dr. Zukiwski received a bachelor's degree in pharmacy from the University of Alberta and a Doctor of Medicine degree from the University of Calgary. He conducted his post-graduate training at St. Thomas Hospital Medical Center in Akron, Ohio and the University of Texas, M.D. Anderson Cancer Center.

David M. Tanen is a co-founder of Arno and has served as a director and its secretary since its inception. Mr. Tanen also served as Arno's President from June 2009 until April 2011. Mr. Tanen also serves as an Officer and Director of Riverbank Capital Securities, Inc., a broker dealer registered with FINRA ("Riverbank"), which engages in private placement activities for public and private companies, primarily in the life science sector, and which performed placement agent services for Arno in 2008 and 2010. Mr. Tanen also serves as an officer of the managing member of Two River Consulting, LLC, which provides management, operational and other services for Arno. See "Certain Relationships and Related Transactions." Prior to founding Two River, from October 1996 to September 2004, Mr. Tanen was a Director of Paramount BioCapital Investments, LLC, a biotechnology focused venture capital company. Mr. Tanen also served as a member of the General Partner of the Orion Biomedical Fund, LP. Mr. Tanen received his B.A. from The George Washington University and his J.D. from Fordham University School of Law.

Scott L. Navins has served as our Treasurer since inception and as our Vice President of Finance since January 2014, and has been responsible for all of our accounting and financial reporting services since the departure of our former Chief Financial Officer in February 2010. He is also the Chief Financial Officer at Two River Consulting, LLC ("Two River"), where he is responsible for all accounting, finance and control activities. Mr. Navins joined Two River in 2005. Prior to joining Two River, from 2004 to 2005 Mr. Navins was the Senior Controller at Westbrook Partners, where he managed the accounting for a \$560 million real estate private equity fund, including financial and partner reporting, tax coordination, maintaining internal controls and overseeing a \$300 million credit facility, among other things. Before that, from 2002 to 2004 Mr. Navins was a Senior Manager at Morgan Stanley, where he managed the accounting for a \$2.4 billion real estate private equity fund. Prior to that Mr. Navins was an Associate in the Finance Group at BlackRock, Inc. and the controller for a high-tech venture capital fund. Mr. Navins also serves as the Financial and Operations Principal of Riverbank Capital Securities (member FINRA/SIPC) and has served as Treasurer of Nile Therapeutics, Inc., a publicly-held biopharmaceutical company, since 2005. Mr. Navins graduated with honors from The George Washington University in 1993, where he earned a Bachelor of Accountancy degree. Mr. Navins passed the Uniform Certified Public Accounting examination in 1993.

Stefan Proniuk, Ph.D. has over 15 years of experience in formulation and product development. Prior to joining Arno, he was the Sr. Manager of Pharmaceutical Technologies at Neurocrine Biosciences (2002-2008) where he was responsible for overseeing development programs from Phase I to III. His group was also responsible for the preformulation of NCEs. Prior to his work at Neurocrine, Dr. Proniuk worked as a scientist at Cima Labs (2001-2002) on the development and scale-up of fast dissolving tablet formulations (OraSolv®, DuraSolv®). Throughout his career he has worked on multiple regulatory submissions and marketed products. Dr. Proniuk holds a Ph.D. degree in Pharmaceutical Sciences from the University of Arizona, an MBA with emphasis in Entrepreneurship from San Diego State University and a Diplom (FH) in Chemical Engineering from the University of Applied Sciences Isny, Germany.

William F. Hamilton, Ph.D. was appointed to Arno's board of directors in October 2008. Dr. Hamilton has served on the University of Pennsylvania faculty since 1967, and is the Landau Professor of Management and Technology, and Director of the Jerome Fisher Program in Management and Technology at The Wharton School and the School of Engineering and Applied Science. Dr. Hamilton serves on the board of directors of Ceptaris Therapeutics, Inc., a privately-held specialty pharmaceutical company that develops small molecule pharmaceuticals licensed from academic laboratories. Dr. Hamilton received his B.S. and M.S. in chemical engineering and his MBA from the University of Pennsylvania, and his Ph.D. in applied economics from the London School of Economics.

Tomer Kariv, a director of Arno since September 2010, is the co-founder and Chief Executive Officer of Pontifax, a group of Israeli based life sciences venture funds focusing on investments in development stage bio-pharmaceutical and med-tech technologies. Mr. Kariv serves as an active board member of many of the funds' portfolio companies, assuming a special responsibility for strategic planning. Among others, Mr. Kariv serves as the Chairman of Check-Cap Ltd and is a board member of Macrocure Ltd. During the 10 years prior to establishing Pontifax in 2004, Mr. Kariv played a key role in investing, managing and nurturing technology driven companies and startups and has held senior management positions at top Israeli financial institutions. Mr. Kariv practiced law with Sullivan & Cromwell, a leading corporate law firm in New York, and holds a B.A. in Economics from Harvard University and a J.D. from Harvard Law School.

Yacov Reizman, a director of Arno since September 2010, has been the Chairman and Chief Executive Officer of FCC Ltd., a private investment company that he founded in 1987. Over the past decade FCC has invested directly in over 50 publicly traded and privately held companies in a diverse range of industries including: infrastructure; shipping; healthcare; and financial services. FCC also specializes in corporate finance and structured investments. Mr. Reizman was also co-founder and co-CEO of Azimuth Ltd., which traded on the TASE. Previously Mr. Reizman served in the Israeli Air Force (IAF) as a fighter pilot (Major) and led large-scale high-tech projects for the IAF, including joint projects with Israeli and U.S. defense industries. Mr. Reizman holds a B.A. in economics and in psychology from Tel Aviv University.

Steven Ruchefsky, a director of Arno since September 2010, is President of Commercial Street Capital LLC, a private investment company and significant stockholder in Arno. For the last decade, Mr. Ruchefsky has been working as an investment manager for the founder and CEO of a multi-billion dollar hedge fund. Mr. Ruchefsky began his career at a prominent New York City law firm where he became a partner, member of management and chair of a specialized litigation group. Upon leaving his law firm and prior to his current employment, Mr. Ruchefsky was a principal of an early stage venture capital operation. In addition to Arno, Mr. Ruchefsky currently sits on the boards of several public and private companies, including Itamar Medical (TASE: ITMR), Kite Pharma, Inc., and MD Solar Sciences, Inc. Mr. Ruchefsky is a graduate of The George Washington University Law School.

Randy Thurman has been a director of Arno since January 2013. Mr. Thurman currently serves as an operating executive and senior advisor in private equity and has worked with firms such as New Mountain Capital LLC and firm AEA Investors LP. Prior to that, he was a Founder, Chairman & CEO of VIASYS Healthcare Inc., a global leader in respiratory and neurological diagnostics, critical care, medical/surgical technologies and orthopedic product development and manufacturing, from 2001 to 2007. Prior to joining VIASYS Healthcare Inc., he was Founder and CEO of Strategic Reserves LLC, which provided advisory services to bio-pharmaceutical, genomic and medical device companies. He also previously served as Executive Chairman of Enzon Inc., a publicly traded biopharmaceutical company, and as Chairman & CEO of Corning Life Sciences, Inc., Corning Incorporated's health care division and the predecessor to Quest Diagnostics Incorporated and Covance Inc. Earlier in his career, Mr. Thurman was with Rorer Pharmaceuticals Inc., where he led its successful acquisition of Revlon Healthcare and subsequent merger with Rhône-Poulenc. He served as President of Rorer Pharmaceuticals Inc. and Rhone-Poulenc Rorer Pharmaceuticals Inc. Mr. Thurman has extensive board of director experience and currently serves as Executive Chairman of Cogent Healthcare and Presbia Inc., and is also a director of Allscripts Inc. Mr. Thurman completed Wharton's Corporate Governance program. Mr. Thurman served as a U.S. Air Force fighter pilot in Vietnam and

graduated from the U.S. Air Force Air Command & Staff College. Mr. Thurman received a B.S. in economics from Virginia Polytechnic Institute and an M.A. in management from Webster University.

Experience, Qualifications, Attributes and Skills of Directors

We look to our directors to lead us through our continued growth as an early-stage public biopharmaceutical company. We believe our directors bring their leadership experience from a variety of life science companies and professional backgrounds which we require to continue to grow and bring value to our stockholders. Messrs. Kariv, Reizman, Ruchefsky, Tanen, and Thurman have venture capital or investment banking backgrounds and offer expertise in financing and growing small companies, particularly small biopharma and life science companies. Each of Drs. Belldegrun and Hamilton and Mr. Tanen have significant experience with early stage private and public companies and bring depth of knowledge in building stockholder value, growing a company from inception and navigating significant corporate transactions and the public company process. Dr. Belldegrun's medical background and experience serving as an investigator in clinical trials of oncology drug candidates allows him to contribute significant medical and scientific expertise. Mr. Mattes' extensive commercialization and general management experience and his current position as our President and Chief Executive Officer allow him to provide a unique insight into our development and growth. As a result of his academic experience and his prior service on the audit committees of several publicly-traded life sciences companies, Dr. Hamilton also brings extensive finance, accounting and risk management knowledge to us. Mr. Thurman's extensive experience in the health care industry allows him to contribute a wealth of operational, financial, and business development expertise to Arno.

Independence of the Board of Directors

In determining whether the members of our board of directors and its committees are independent, we have elected to use the definition of "independence" set forth in the listing standards of the NASDAQ Stock Market. After considering all relevant relationships and transactions, our board of directors, in consultation with legal counsel, has determined that Messrs. Kariv, Reizman, Ruchefsky, Thurman and Dr. Hamilton are "independent" within the meaning of the applicable listing standard of the NASDAQ Stock Market. Messrs. Mattes, Tanen and Dr. Belldegrun are not independent, as defined by applicable NASDAQ listing standards.

Executive Compensation

The following table sets forth all of the compensation for the 2013 and 2012 fiscal years awarded to, earned by or paid to (i) our principal executive officer during the fiscal year ended December 31, 2013; and (ii) two other individuals that served as an executive officer at the conclusion of the fiscal year ended December 31, 2013 and who received in excess of \$100,000 in total compensation during such fiscal year. We refer to these individuals as our named executives.

Summary Compensation Table

Name and Principal Position	Year	Salary (\$)	Bonus (1)(\$)	Option Awards (2)(\$)	All Other Compensation (3)(\$)	Total(\$)
Glenn R. Mattes	2013	378,560	189,280	805,280	18,000	1,391,120
President & CEO	2012	364,000	182,000	-	18,000	564,000
Alexander Zukiwski	2013	408,000	204,000	694,492	12,000	1,318,492
VP & Chief Medical Officer	2012	394,000	197,000	-	12,000	603,000
Stefan Proniuk	2013	215,000	107,500	105,828	-	428,328
VP of Product Development	2012	208,000	68,640	-	-	276,640

(3) Amounts represent automobile allowances.

Employment Agreements, Termination of Employment and Change-in-Control Arrangements

Glenn Mattes

President and Chief Executive Officer

 ⁽¹⁾ Amounts indicated are the maximum eligible bonuses for 2013 as 2013 bonuses have not yet been determined.
 Except as otherwise noted, amounts reflect the grant date fair value of option awards granted under the Company's

 (2) 2005 Stock Option Plan, computed pursuant to Financial Accounting Standards Board's Accounting Standards
 Codification 718 "Compensation – Stock Compensation".

Mr. Mattes' employment with us is governed by an employment agreement dated April 25, 2011. The agreement provides for a three-year term expiring on April 25, 2014, subject to automatic renewal for successive one-year periods until either party provides the other party with at least 90 days' prior written notice of nonrenewal. Pursuant to the employment agreement, Mr. Mattes will receive an initial annualized base salary of \$100,000 for a period of one year, after which his base salary will be increased to \$350,000 per year, subject to further increases on an annual basis in accordance with the consumer price index plus 1%. Accordingly, Mr. Mattes' base salary was increased to \$378,560 on January 1, 2013. The employment agreement further provides that, subject to the successful achievement of specific performance objectives to be established by the Board, Mr. Mattes will be eligible to receive an annual performance bonus of up to 50% of his annualized base salary; provided, however, that Mr. Mattes will be eligible to receive a performance bonus of up to \$175,000 during the first year of the term. For 2011, our Board of Directors awarded Mr. Mattes a performance bonus of \$120,342, representing 100% of his target bonus prorated for his service during the year. For 2012, our Board awarded Mr. Mattes a performance bonus of \$182,000, representing 100% of his target bonus. In the event of a "Change of Control" (as defined in the Company's 2005 Stock Option Plan), Mr. Mattes shall receive a cash bonus in an amount equal to the greater of (a) \$100,000, and (b) 0.15% of the amount by which the aggregate consideration to be received by Arno and/or our stockholders in connection with such Change of Control exceeds \$100,000,000.

Pursuant to the employment agreement, on the date of the agreement, Mr. Mattes was granted 10-year options to purchase a total of 294,297 shares of our common stock at an exercise price equal to \$8.00 per share. Options relating to 60% of such shares are designated as "Employment Options" and options relating to the remaining 40% of the shares are designated as "Performance Options." The right to purchase 25% of the shares subject to the Employment Options will vest and become exercisable on April 25, 2012, and thereafter the remaining shares subject to the Employment Options will vest and become exercisable in 24 equal monthly installments. The right to purchase the shares subject to the Performance Options shall vest and become exercisable, if at all, with respect to one-third of the shares in each calendar year, or a pro-rata portion thereof for a period less than a full year, subject to the successful achievement of specific performance objectives to be established by the Board. On January 17, 2012, the Board determined that, for the pro-rated period ended December 31, 2011, Mr. Mattes' Performance Options would vest in the maximum potential amount of 26,984 shares. In addition, Mr. Mattes was granted 31,250 shares of our common stock (the "Restricted Shares") on the date of the employment agreement. The Restricted Shares shall vest in 12 equal monthly installments beginning on May 25, 2011. On January 14, 2013, the Board determined that, for the calendar year ended December 31, 2012, Mr. Mattes' Performance Options would vest in the maximum potential amount of 39,239 shares.

On January 14, 2013, Mr. Mattes was granted 10-year options to purchase a total of 64,500shares of our common stock at an exercise price equal to \$2.40 per share. Options relating to 60% of such shares are designated as "Employment Options" and options relating to the remaining 40% of the shares are designated as "Performance Options." The right to purchase one-third of the shares subject to the Employment Options vested immediately and the remaining shares subject to the Employment Options will vest and become exercisable in 24 equal monthly installments commencing January 31, 2013. The right to purchase one-third of the shares subject to the Performance Options vested immediately and, of the remaining shares, 50% shall vest and become exercisable, if at all, in each calendar year thereafter, subject to the successful achievement of specific performance objectives to be established by the Board.

Also on January 14, 2013, the Board determined that the exercise price applicable to all stock options previously granted to Mr. Mattes would be reduced from \$8.00 to \$2.40, the conversion price of the Debentures issued in our 2012 offering of debentures and warrants.

On October 7, 2013, our board of directors authorized a grant of a 10-year stock option under the 2005 Plan to Mr. Mattes to purchase a number of shares of our common stock equal to 5.5% of the total number of shares issuable by us upon the conversion of our outstanding Debentures issued 2012. Accordingly, after all of the Debentures were converted on October 29, 2013, our board granted to Mr. Mattes a 10-year stock option to purchase 386,697 shares, which option vests in 36 equal monthly installments commencing on the first month anniversary of the date of grant and continuing each month thereafter until fully vested, provided that such vesting shall accelerate upon a "change of control" of the Company, as such term is defined under the 2005 Plan (but excluding any transaction conducted primarily for purposes of raising capital). The exercise price of the such option is \$2.40 per share, which amount reflects our board of directors' determination of fair market value on the date of grant.

The employment agreement provides that if Arno terminates Mr. Mattes without "Cause," or if he resigns for "Good Reason" (each as defined in the agreement), then he shall be entitled to: (i) any earned but unpaid performance bonus; (ii) continued payment of his then current annualized base salary for a period of 12 months; (iii) an acceleration in the vesting of the Employment Options and Restricted Shares such that all unvested Employment Options and Restricted Shares shall be deemed vested as if Mr. Mattes had remained continuously employed with Arno for one year following his termination date; and (iv) the vesting of all earned but unvested Performance Options. In addition to the foregoing, in the event that Mr. Mattes' employment is terminated in connection with a Change in Control, then Mr. Mattes shall also be entitled to the immediate vesting of all unvested Employment Options, Performance Options, and Restricted Shares.

Alexander Zukiwski, M.D.

Vice President and Chief Medical Officer

Dr. Zukiwski's employment with us is governed by an employment agreement dated June 22, 2011. The agreement provides for a three-year term expiring on June 22, 2014, subject to automatic renewal for successive one-year periods until either party provides the other party with at least 90 days' prior written notice of nonrenewal. Pursuant to the employment agreement, Dr. Zukiwski was entitled to an initial annualized base salary of \$375,000, which was subsequently increased to \$394,000 for 2012 and to \$408,000 for 2013. The employment agreement further provides that, subject to the successful achievement of specific performance objectives to be established by the Board, Dr. Zukiwski will be eligible to receive an annual performance bonus of up to 50% of his annualized base salary. For 2011, our Board awarded Dr. Zukiwski a performance bonus of \$100,000, representing approximately 100% of his target bonus, prorated for his service during the year. For 2012, our Board awarded Dr. Zukiwski a performance bonus of \$197,000, representing 100% of his target bonus. Pursuant to the employment agreement, we have also agreed to reimburse Dr. Zukiwski in an amount up to \$200,000 for expenses incurred in connection with the relocation of Dr. Zukiwski's primary residence to the northern New Jersey area, which amounts are subject to repayment as described in the employment agreement in the event of Dr. Zukiwski's voluntary termination of his employment (other than for "Good Reason," as defined in the employment agreement) or Arno's termination of his employment for "Cause" (as defined in the employment agreement).

Pursuant to the employment agreement, on the date of the agreement, Dr. Zukiwski was granted 10-year options to purchase a total of 218,750 shares of our common stock at an exercise price equal to \$8.00 per share. Options relating to 50% of such shares are designated as "Employment Options" and options relating to the remaining 50% of the shares are designated as "Performance Options." The right to purchase 25% of the shares subject to the Employment Options will vest and become exercisable on June 22, 2012, and thereafter the remaining shares subject to the Employment Options will vest and become exercisable in 24 equal monthly installments. The right to purchase the shares subject to the Performance Options shall vest and become exercisable, if at all, with respect to one-third of the shares in each calendar year, or a pro-rata portion thereof for a period less than a full year, subject to the successful achievement of specific performance objectives to be established by the Board. On January 17, 2012, the Board determined that, for the pro-rated period ended December 31, 2011, Dr. Zukiwski's Performance Options would vest in the maximum potential amount of 19,278 shares. On January 14, 2013, the Board determined that, for the calendar year ended December 31, 2012, Dr. Zukiwski's Performance Options would vest in the maximum potential amount of 36,458 shares.

On January 14, 2013, Dr. Zukiwski was granted 10-year options to purchase a total of 73,125 shares of our common stock at an exercise price equal to \$2.40 per share. Options relating to 50% of such shares are designated as "Employment Options" and options relating to the remaining 50% of the shares are designated as "Performance Options." The right to purchase one-third of the shares subject to the Employment Options vested immediately and the remaining shares subject to the Employment Options will vest and become exercisable in 24 equal monthly installments commencing January 31, 2013. The right to purchase one-third of the shares subject to the Performance Options vested immediately and, of the remaining shares, 50% shall vest and become exercisable, if at all, in each calendar year thereafter, subject to the successful achievement of specific performance objectives to be established by the Board.

Also on January 14, 2013, the Board determined that the exercise price applicable to all stock options previously granted to Dr. Zukiwski would be reduced from \$8.00 to \$2.40, the conversion price of the Debentures issued in our 2012 offering of debentures and warrants.

On October 7, 2013, our board of directors authorized a grant of a 10-year stock option under the 2005 Plan to Dr. Zukiwski to purchase a number of shares of our common stock equal to 4.5% of the total number of shares issuable by us upon the conversion of our outstanding Debentures issued 2012. Accordingly, after all of the Debentures were converted on October 29, 2013, our board granted to Dr. Zukiwski a 10-year stock option to purchase 316,3897 shares, which option vests in 36 equal monthly installments commencing on the first month anniversary of the date of grant and continuing each month thereafter until fully vested, provided that such vesting shall accelerate upon a "change of control" of the Company, as such term is defined under the 2005 Plan (but excluding any transaction conducted primarily for purposes of raising capital). The exercise price of the such option is \$2.40 per share.

The employment agreement provides that if Arno terminates Dr. Zukiwski without "Cause," or if he resigns for "Good Reason" (each as defined in agreement), then he shall be entitled to: (i) any earned but unpaid performance bonus; (ii) continued payment of his then current annualized base salary for a period of 12 months; and (iii) the acceleration of

the vesting of the Employment Options such that all unvested Employment Options shall be deemed vested as of the termination date. In addition to the foregoing, in the event that Dr. Zukiwski's employment is terminated 60 days prior to or within 12 months following a "Change in Control" (as defined in the employment agreement), Dr. Zukiwski shall also be entitled to the immediate vesting of all unvested Performance Options.

Stefan Proniuk, Ph.D.

Vice President of Product Development

Dr. Proniuk's employment with us is governed by a letter agreement dated January 31, 2008, as amended on August 22, 2010. The letter agreement provides for Dr. Proniuk's employment as our Director of Product Development on an at-will basis. Dr. Proniuk was subsequently promoted to Vice President of Product Development in January 2012. Under the letter agreement, Dr. Proniuk is entitled to an annual base salary of \$150,000, which base salary was subsequently increased to \$165,000 on November 16, 2008, to \$167,000 on January 1, 2009, to \$174,800 on January 1, 2011, to \$187,800 on June 20, 2011, to \$208,000 on January 1, 2012, and to \$215,000 on January 1, 2013. In addition, the letter agreement provides that Dr. Proniuk is eligible to receive an annual performance bonus of up to 15% of his base salary upon the successful completion of annual corporate and individual milestones, which target percentage was subsequently increased to 25% on January 1, 2010, and to 33% on January 1, 2012, and, solely with respect to the 2013 fiscal year, has been increased to 50%. For 2011, our Board awarded Dr. Proniuk a performance bonus of \$47,000, representing approximately 103% of his target bonus. For 2012, our Board awarded Dr. Proniuk a performance bonus of \$68,640, representing 100% of his target bonus.

Pursuant to the letter agreement, on the date of the agreement, Dr. Proniuk was granted 10-year options to purchase 9,968 shares of our common stock at an exercise price of \$19.36, with one-fourth vesting after one year and the remainder vesting in 36 equal monthly installments thereafter. In addition, on June 20, 2011, Dr. Proniuk was granted 10-year options to purchase a total of 31,250 shares of our common stock at an exercise price equal to \$8.00 per share. Options relating to 55% of such shares were designated as "Employment Options" and options relating to the remaining 45% of the shares were designated as "Performance Options." The right to purchase 3,125 of the shares subject to the Employment Options vested immediately and, of the remaining shares, 25% vested on the first anniversary of the grant date, with the remainder vesting in 24 equal monthly installments thereafter. The right to purchase the shares subject to the Performance Options shall vest and become exercisable, if at all, with respect to one-third of the shares in each calendar year, or a pro-rata portion thereof for a period less than a full year, subject to the successful achievement of specific performance objectives to be established by the Board. On January 17, 2012, the Board determined that, for the pro-rated period ended December 31, 2011, Proniuk's Performance Options would vest in the maximum potential amount of 2,504 shares. On January 14, 2013, the Board determined that, for the calendar year ended December 31, 2012, Dr. Proniuk's Performance Options would vest in the maximum potential amount of 4,687 shares.

On September 19, 2011, in consideration for cancelling the 10-year options to purchase 9,968 shares of our common stock that were issued to Dr. Proniuk on January 31, 2008, Dr. Proniuk was granted 10-year options to purchase 10,000 shares of our common stock at an exercise price of \$8.00, with one-half immediately vested and the remainder vesting in 24 equal monthly installments commencing October 19, 2011.

On January 14, 2013, Dr. Proniuk was granted 10-year options to purchase a total of 13,750 shares of our common stock at an exercise price equal to \$2.40 per share. Options relating to 50% of such shares are designated as "Employment Options" and options relating to the remaining 50% of the shares are designated as "Performance Options." The right to purchase one-third of the shares subject to the Employment Options vested immediately and the remaining shares subject to the Employment Options will vest and become exercisable in 24 equal monthly installments commencing January 31, 2013. The right to purchase one-third of the shares subject to the Performance Options vested immediately and, of the remaining shares, 50% shall vest and become exercisable, if at all, in each calendar year thereafter, subject to the successful achievement of specific performance objectives to be established by the Board.

Also on January 14, 2013, the Board determined that the exercise price applicable to all stock options previously granted to Dr. Proniuk would be reduced from \$8.00 to \$2.40, the conversion price of the Debentures issued in our 2012 offering of debentures and warrants.

On October 7, 2013, our board of directors authorized a grant of a 10-year stock option under the 2005 Plan to Dr. Proniuk to purchase a number of shares of our common stock equal to 0.65% of the total number of shares issuable by us upon the conversion of our outstanding Debentures issued 2012. Accordingly, after all of the Debentures were converted on October 29, 2013, our board granted to Dr. Proniuk a 10-year stock option to purchase 45,701 shares, which option vests in 36 equal monthly installments commencing on the first month anniversary of the date of grant

and continuing each month thereafter until fully vested, provided that such vesting shall accelerate upon a "change of control" of the Company, as such term is defined under the 2005 Plan (but excluding any transaction conducted primarily for purposes of raising capital). The exercise price of the such option is \$2.40 per share.

Outstanding Equity Awards at Fiscal Year-End

The following table sets forth information concerning stock options held by the named executive officers at December 31, 2013:

Number of	Number of			
Securities	Securities	Ontion Evereise	Ontion	
Underlying	Underlying	•		0
Unexercised Options	Unexercised Options	Price (\$)	Expiration Dat	е
Exercisable	Unexercisable			
66,224	51,495	2.40	4/25/21	(1)
154,506	22,072	2.40	4/25/21	(2)
25,800	12,900	2.40	1/14/23	(3)
8,600	17,200	2.40	1/14/23	(4)
10,741	375,956	2.40	11/4/23	(5)
55,736	53,639	2.40	6/22/21	(6)
88,867	20,508	2.40	6/22/21	(7)
24,375	12,188	2.40	1/14/23	(8)
12,188	24,375	2.40	1/14/23	(9)
8,788	307,601	2.40	11/4/23	(10)
7,192	6,870	2.40	6/20/21	(11)
14,551	2,637	2.40	6/20/21	(12)
10,000	-	2.40	9/19/21	(13)
4,583	2,292	2.40	1/14/23	(14)
2,292	4,583	2.40	1/14/23	(15)
1,269	44,432	2.40	11/4/23	(16)
	Securities Underlying Unexercised Options Exercisable 66,224 154,506 25,800 8,600 10,741 55,736 88,867 24,375 12,188 8,788 7,192 14,551 10,000 4,583 2,292	Securities Securities Underlying Underlying Unexercised Options Unexercised Options Exercisable Unexercisable 66,224 51,495 154,506 22,072 25,800 12,900 8,600 17,200 10,741 375,956 55,736 53,639 24,375 12,188 12,188 24,375 8,788 307,601 7,192 6,870 14,551 2,637 10,000 - 4,583 2,292 2,292 4,583	Securities Securities Option Exercise Underlying Underlying Option Exercise Unexercised Options Unexercised Options Price (\$) Exercisable Unexercisable 2.40 66,224 51,495 2.40 154,506 22,072 2.40 25,800 12,900 2.40 8,600 17,200 2.40 10,741 375,956 2.40 55,736 53,639 2.40 88,867 20,508 2.40 24,375 12,188 2.40 12,188 24,375 2.40 8,788 307,601 2.40 7,192 6,870 2.40 14,551 2,637 2.40 10,000 - 2.40 4,583 2,292 2.40 2,292 4,583 2.40	Securities Securities Option Exercise Price (\$) Option Expiration Date (\$) Underlying Unexercised Options Exercisable Unexercisable 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 </td

(4)

Option granted April 25, 2011 relating to an aggregate of 117,719 shares and vesting up to one-third in each (1)calendar year, or a pro-rata portion thereof for a period less than a full year, at the discretion of the Board of Directors.

Option granted April 25, 2011 relating to an aggregate of 176,578 shares, of which 25% vested on the first anniversary of the grant date and the remainder vest in 24 equal monthly installments thereafter.

⁽³⁾ Option granted January 14, 2013 relating to an aggregate of 38,700 shares, of which one-third vested immediately and the remainder vest in 24 equal monthly installments thereafter, commencing January 31, 2013.

Option granted January 14, 2013 relating to an aggregate of 25,800 shares, of which one-third vested immediately and up to one-half of the remainder vest annually based on the achievement of performance milestones as determined by the Board of Directors.

Option granted November 4, 2013 relating to an aggregate of 386,697 shares and vesting in 36 equal monthly installments commencing December 4, 2013.

- Option granted June 22, 2011 relating to an aggregate of 109,375 shares and vesting up to one-third in each
- (6) calendar year, or a pro-rata portion thereof for a period less than a full year, at the discretion of the Board of Directors.
- Option granted June 22, 2011 relating to an aggregate of 109,375 shares, of which 25% vested on the first anniversary of the grant date and the remainder vest in 24 equal monthly installments thereafter.
- Option granted January 14, 2013 relating to an aggregate of 36,562 shares, of which one-third vested immediately and the remainder vest in 24 equal monthly installments thereafter, commencing January 31, 2013.

 Option granted January 14, 2013 relating to an aggregate of 36,562 shares, of which one-third vested immediately
- (9) and up to one-half of the remainder vest annually based on the achievement of performance milestones as determined by the Board of Directors.
- Option granted November 4, 2013 relating to an aggregate of 316,389 shares and vesting in 36 equal monthly installments commencing December 4, 2013.
 - Option granted June 20, 2011 relating to an aggregate of 14,062 shares and vesting up to one-third in each
- (11)calendar year, or a pro-rata portion thereof for a period less than a full year, at the discretion of the Board of Directors.
- Option granted June 20, 2011 relating to an aggregate of 17,187 shares, of which 3,125 shares vested immediately
- (12) and, of the remaining shares, 25% vested on the first anniversary of the grant date, with the remainder vesting in 24 equal monthly installments thereafter.
- Option granted September 19, 2011 relating to an aggregate of 10,000 shares, of which 50% vested immediately and the remainder vest in 24 equal monthly installments commencing October 19, 2011.
- Option granted January 14, 2013 relating to an aggregate of 6,875 shares, of which one-third vested immediately and the remainder vest in 24 equal monthly installments thereafter, commencing January 31, 2013.
 - Option granted January 14, 2013 relating to an aggregate of 6,875 shares, of which one-third vested immediately
- (15) and up to one-half of the remainder vest annually based on the achievement of performance milestones as determined by the Board of Directors.
- Option granted November 4, 2013 relating to an aggregate of 45,701 shares and vesting in 36 equal monthly installments commencing December 4, 2013.

Director Compensation

Prior to October 7, 2013, our non-employee directors were entitled to receive the following in consideration for their service on the Board: (1) an annual retainer of \$25,000; (2) a stock option grant of 3,750 shares of the Company's common stock upon their initial appointment or election to the Board; and (3) an annual stock option grant of 1,250 shares of the Company's common stock. In addition, any non-employee director designated as chairman of the Board was entitled to an annual retainer of \$10,000, the chair of the Board's audit committee was entitled to an additional annual retainer of \$8,000, and the chairs of the Board's compensation and nominating & corporate governance committees were entitled to annual retainers of \$4,000. In addition, as our chairman, Dr. Belldegrun received an annual retainer equal to \$150,000. Stock options awarded to our non-employee directors have a 10-year term, vest in three equal annual installments commencing on the first anniversary of the grant date, and have an exercise price equal to the fair market value of the Company's common stock on the grant date.

Effective October 7, 2013, our board of directors adopted a new non-employee director compensation plan which provides the following compensation to our non-employee directors for their service on our Board: (1) an annual cash retainer of \$50,000; (2) a 10-year stock option under the 2005 Plan to purchase a number of shares of our common stock equal to 0.10% of our then outstanding shares of common stock upon his or her initial appointment or election to the Board, which vests in 36 equal monthly installments commencing on the first month anniversary of the grant date; and (3) an annual 10-year stock option under the 2005 Plan to purchase a number of shares of our common stock equal to 0.05% of our then outstanding shares of common stock, which option vests in its entirety on the first anniversary of the grant date. In addition, any non-employee director designated as chairman of the Board is entitled to an annual retainer of \$150,000, the chairs of the Board's audit and finance committees are entitled to additional annual retainers of \$10,000, and the chairs of the Board's compensation and nominating & corporate governance committees are entitled to additional annual retainers of \$5,000. The Chairman of the Board shall also be entitled to receive a stock option to purchase a number of shares of our common stock equal to 0.20% of our then outstanding shares of common stock upon his or her initial appointment or election to the Board and an annual stock option to purchase a number of shares equal to 0.10% of our then outstanding shares of common stock. Stock options awarded to our non-employee directors have a 10-year term, have an exercise price equal to the fair market value of our common stock on the grant date, and vest in their entirety upon a "change of control" of the Company, as such term is defined in the plan pursuant to which such options are granted.

In addition to the stock options issuable pursuant to the non-employee director compensation plan adopted on October 7, 2013, on November 4, 2013, the Board approved grants under the 2005 Plan of 10-year stock options to Dr. Belldegrun and Mr. Ruchefsky to purchase 3,417,713 and 136,709 shares of our common stock, respectively, which amounts represent 5.0% and 0.20%, respectively, of our fully-diluted outstanding shares of common stock on such grant date. Such additional stock option grants are subject to the same terms and conditions as the initial option grants issuable to our non-employee directors, as described above. Further, our board of directors authorized additional 10-year stock options to Mr. Ruchefsky to purchase a number of shares of our common stock equal to 0.20% and 0.10%, respectively, of the then fully-diluted outstanding shares of our common stock. Each of the additional stock options to be granted to Mr. Ruchefsky shall vest and become exercisable in 36 equal monthly installments commencing on the first month anniversary of the applicable grant date, shall be exercisable at the then fair market value of the common stock (as determined in accordance with our stock option pricing policy in effect on the date of grant), and shall vest and become exercisable upon a change of control, as described in the 2005 Plan.

The following table sets forth the compensation paid to our directors for their service in 2013.

Name	Fees earned or	Option	Total	
	paid in cash	Awards (1) (2)		
Arie S. Belldegrun, M.D.	\$ 150,000	\$ 7,347,423	\$7,497,423	
William F. Hamilton, Ph.D.	\$ 39,750	\$ 141,297	\$181,047	
Tomer Kariv	\$ 32,250	\$ 141,297	\$173,547	
Glenn Mattes	\$ -	\$ -	\$-	
Yacov Reizman	\$ 32,750	\$ 141,297	\$174,047	
Steven B. Ruchefsky	\$ 35,000	\$ 423,891	\$458,891	
David M. Tanen	\$ 31,250	\$ 141,297	\$172,547	
Randy H. Thurman	\$ 46,333	\$ 182,797	\$229,130	

- Except as otherwise noted, amounts reflect the grant date fair value of option awards granted under the Company's (1)2005 Stock Option Plan, computed pursuant to Financial Accounting Standards Board's Accounting Standards Codification 718 "Compensation Stock Compensation."
 - As of December 31, 2013, the aggregate number of option awards outstanding for each director was as follows: Arie S. Belldegrun, M.D., options to purchase 3,624,218 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 72,448 shares; William F. Hamilton, Ph.D., options to purchase 8,448 shares; William F. Hamilton, Ph.D., options to purchase 8,448 shares; William F. Hamilton, Ph.D., options to purchase 8,448 shares; William F. Hamilton, Ph.D., options to purchase 8,448 shares; William F. Hamilton, Ph.D., options to purchase 8,448 shares; William F. Hamilton, Ph.D., options to purchase 8,448 shares; William F. Hamilton, Ph.D., options to purchase 8,448 shares; William F. Hamilton, Ph.D., options to purchase 8,448 shares; William F. Hamilton, Ph.D., options to purchase 8,448 shares; William F. Hamilton, Ph.D., options to purchase 8,448 s
- (2) 73,448 shares; Tomer Kariv, options to purchase 72,198 shares; Yacov Reizman, options to purchase 72,198 shares; Glenn Mattes, options to purchase 745,494 shares; Steven B. Ruchefsky, options to purchase 209,094 shares; David M. Tanen, options to purchase 70,948 shares; and Randy H. Thurman, options to purchase 93,448 shares.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table summarizes certain information regarding the beneficial ownership (as such term is defined in Rule 13d-3 under the Exchange Act) of our common stock as of January 27, 2014 by: (i) each of our current directors, (ii) each of our "named executive officers," as defined above under "Executive Compensation," (iii) all of our current directors and executive officers as a group, and (iv) each person known by us to be the beneficial owner of more than 5% of our common stock. Except as indicated in the footnotes below, the security and stockholders listed below possess sole voting and investment power with respect to their shares. Except as otherwise indicated, the address of each of our executive officers and directors identified below is 200 Route 31 North, Suite 104, Flemington, New Jersey 08822.

Name of Beneficial Owner	No. Shares of Common Stock Beneficially Owned (1)	Percent of Class (1)
Arie S. Belldegrun, M.D. (2)	3,414,577	15.0
Glenn Mattes (3)	444,736	2.1
Alexander Zukiwski (4)	555,967	2.7
David M. Tanen (5)	207,011	1.0
Stefan Proniuk, Ph.D. (6)	71,375	*
William F. Hamilton, Ph.D. (7)	72,547	*
Tomer Kariv (8)	3,417,613	15.2
Yacov Reizman (9)	99,874	*
Steven B. Ruchefsky (10)	4,493,943	19.3
Randy Thurman (11)	88,385	*
All current executive officers and directors as a group (11 persons)	12,884,719	44.7
Pontifax (8) 14 Shenkar St. Herzeliya 46140 Israel	3,417,613	15.2
Commercial Street Capital, LLC (10) 800 Westchester Ave. Rye Brook, NY 10573	4,493,943	19.3
Auriga Investors (12)(13) 5-Rue Jean Monnet L-2180 Luxembourg	1,285,137	9.9
Bonderman Family LP (12)(14) 301 Commerce Street Suite 3000 Fort Worth, TX 76102	3,750,000	9.9

Frost Gamma Investments Trust (15) 4400 Biscayne Blvd. Miami, FL 33137	2,062,500	9.5
Green Fields Offshore Inc. (12)(16) Four Seasons Residences, Spring 19D Jl. Setiabudi Tengah Jakarta, 12910 Indonesia	2,582,115	9.9
OPKO Health, Inc. (12)(17) 4400 Biscayne Blvd. Miami, FL 33137	2,499,999	9.9
Perceptive Life Sciences Master Fund, Ltd. (12)(18) c/o Perceptive Advisors LLC 499 Park Ave, 25 th Floor New York, NY 10022	11,110,083	9.9
Quantum Partners LP (12)(19) c/o Soros Fund Management LLC 888 Seventh Avenue New York, NY 10106	12,770,676	9.9
Sabby Management, LLC (12)(20) 10 Mountainview Road, Suite 205 Upper Saddle River, NJ 07458	4,250,124	9.9
Talpion Equity Partners Master Fund LP (12) (21) 65 East 55 th Street 34 th Floor New York, NY 10022	1,250,001	5.9

* represents less than 1%.

Based upon 20,370,910 issued and outstanding shares of our common stock as of January 27, 2014. Beneficial ownership is determined in accordance with Rule 13d-3 under the Exchange Act, and includes any shares as to which the security or stockholder has sole or shared voting power or investment power, and also any shares which

- (1) the security or stockholder has the right to acquire within 60 days of the date hereof, whether through the exercise or conversion of any stock option, convertible security, warrant or other right. The indication herein that shares are beneficially owned is not an admission on the part of the security or stockholder that he, she or it is a direct or indirect beneficial owner of those shares.
 - Beneficial ownership includes: (i) 3,115 shares of our common stock and 262,660 shares issuable upon the exercise of stock options held by Dr. Belldegrun; (ii) 379,294 shares of our common stock and 770,450 shares issuable upon the exercise of warrants held by Arie and Rebecka Belldegrun as Trustees of the Belldegrun Family Trust dated February 18, 1994; (iii) 100,481 shares of our common stock and 222,221 shares issuable upon the exercise of warrants held by the Arie S. Belldegrun M.D. Inc. Profit Sharing Plan; (iv) 143,809 shares of our common stock and 223,957 shares issuable upon the exercise of warrants held by Leumi Overseas Trust Corporation Limited
- ("Leumi") as Trustee of the BTL Trust; (v) 254,887 shares of our common stock and 541,665 shares issuable upon the exercise of warrants held by Leumi as Trustee of the Tampere Trust; and (vi) 174,644 shares of our common stock and 339,894 shares issuable upon the exercise of warrants held by MDRB Partnership, L.P. ("MDRB"). Dr. Belldegrun is a beneficiary of each of the BTL Trust and the Tampere Trust and is the managing partner of MDRB. Dr. Belldegrun holds voting and/or dispositive power over the shares held by MDRB and the Arie S. Belldegrun M.D. Inc. Profit Sharing Plan. Richard J. Guillaume and Christopher R.P. Lees, directors of Leumi, hold voting and/or dispositive power over the shares held by Leumi as trustee of each of the BTL Trust and the Tampere Trust.
- (3) Beneficial ownership includes 77,203 shares of our common stock, 97,220 shares issuable upon exercise of warrants, and 270,313 shares issuable upon the exercise of options.
- (4) Beneficial ownership includes 117,026 shares of our common stock, 249,998 shares issuable upon exercise of warrants, and 188,943 shares issuable upon the exercise of options.
 - Beneficial ownership includes 171,712 shares of our common stock, 18,691 shares held by Mr. Tanen's minor
- (5) children, 10,306 shares issuable upon exercise of warrants and 6,302 shares issuable upon the exercise of options held by Mr. Tanen.
- Beneficial ownership includes 10,047 shares of our common stock, 22,221 shares issuable upon exercise of warrants, and 39,107 shares issuable upon the exercise of options.
- Beneficial ownership includes 22,079 shares of our common stock, 41,666 shares issuable upon the exercise of warrants and 8,802 shares issuable upon the exercise of stock options.
 - Beneficial ownership includes: (i) 7,552 shares issuable upon the exercise of stock options held by Mr. Kariv; and
- (8) (ii) 1,308,121 shares of our common stock and 2,101,940 shares issuable upon the exercise of warrants held by affiliates of Pontifax, of which Mr. Kariv is chief executive officer. Mr. Kariv and Ran Nussbaum hold voting and/or dispositive power over the shares held by Pontifax.
 - Beneficial ownership includes: (i) 7,552 shares issuable upon the exercise of stock options held by Mr. Reizman;
- (9) and (ii) 38,285 shares of our common stock and 54,037 shares issuable upon the exercise of warrants held by FCC Ltd., of which Mr. Reizman is chairman and chief executive officer.
- (10) Beneficial ownership includes: (i) 3,125 shares issuable upon the exercise of warrants and 15,158 shares issuable upon the exercise of stock options held by Mr. Ruchefsky; and (ii) 1,596,272 shares of our common stock and 2,879,388 shares issuable upon the exercise of warrants held by Commercial Street Capital, LLC, of which Mr.

- Ruchefsky is president. Mr. Ruchefsky holds voting and/or dispositive power over the shares held by Commercial Street Capital, LLC.
- (11) Beneficial ownership includes 1,250 shares of our common stock and 87,135 shares issuable upon the exercise of options.
 - Notwithstanding the number of shares of our common stock shown as beneficially owned by the security holder in the table above, the Series A Warrants, Series B Warrants, or 2013 Warrants held by the security holder
- (12) provide that the security holder may not exercise such Series A Warrants, Series B Warrants, or 2013 Warrants to the extent that the security holder would beneficially own in excess of 9.99% of our outstanding common stock immediately after giving effect to such exercise.

- Beneficial ownership includes (i) 25,000 shares of our common stock and 50,000 shares issuable upon the exercise of warrants held by Auriga Global Investors SV, SA and (ii) 376,804 shares of our common stock,
- (13) 520,833 shares issuable upon the exercise of Series A Warrants, and 312,500 shares issuable upon the exercise of Series B Warrants, all held by Auriga Investors Montserrat Global Fund. Dr. Raj Mehra holds voting and/or dispositive power over the shares held by Auriga Investors Montserrat Global Fund and Auriga Global Investors SV, SA.
- Beneficial ownership includes 2,500,000 shares issuable upon the exercise of warrants. Leonard Potter holds voting and/or dispositive power over the shares held by Bonderman Family LP.
- (15) Beneficial ownership includes 1,375,000 shares issuable upon the exercise of warrants. Phillip Frost holds voting and/or dispositive power over the shares held by Frost Gamma Investments Trust.
- Beneficial ownership includes 100,480 shares of our common stock and 2,481,635 shares issuable upon the (16) exercise of warrants. Anton Linderum holds voting and/or dispositive power over the shares held by Green Fields Offshore Inc.
- (17) Beneficial ownership includes 1,666,666 shares issuable upon the exercise of warrants. Beneficial ownership includes 2,034,721 shares of our common stock and 9,075,362 shares issuable upon the
- (18) exercise of warrants. Joseph Edelman holds voting and/or dispositive power over the shares held by Perceptive Life Sciences Master Fund, Ltd.
 - Beneficial ownership includes 10,768,689 shares issuable upon the exercise of warrants. Soros Fund Management LLC ("SFM") serves as principal investment manager to Quantum Partners LP. As such, SFM has been granted
- (19) investment discretion over portfolio investments, including the shares reported in the table above, held for the account of Quantum Partners LP. George Soros serves as Chairman of SFM and Robert Soros serves as President and Deputy Chairman of SFM.
 - Beneficial ownership includes: (i) with respect to Sabby Healthcare Volatility Master Fund, Ltd., 807,634 shares of our common stock and 2,013,888 shares issuable upon the exercise of warrants; and (ii) with respect to Sabby Volatility Warrant Master Fund, Ltd., 386,937 shares of our common stock and 1,041,665 shares issuable upon the exercise of warrants. Each of Sabby Healthcare Volatility Master Fund, Ltd. and Sabby Volatility Warrant
- (20) Master Fund, Ltd. (collectively, the "Sabby Funds") has indicated to us that Hal Mintz has voting and investment power over the shares held by it. Each of the Sabby Funds has also indicated to us that Sabby Management, LLC serves as its investment manager, that Hal Mintz is the manager of Sabby Management, LLC and that each of Sabby Management, LLC and Hal Mintz disclaim beneficial ownership over these shares except to the extent of any pecuniary interest therein.
- (21) Beneficial ownership includes 833,334 shares issuable upon the exercise of warrants. Henry Swieca holds voting and/or dispositive power over the shares held by Talpion Equity Partners Master Fund LP.

TRANSACTIONS WITH RELATED PERSONS, PROMOTERS AND CERTAIN CONTROL PERSONS

Dr. Belldegrun and Mr. Tanen, each a current director and substantial stockholder of Arno, and Mr. Kazam, a director until September 2010 and substantial stockholder of Arno, control Two River Consulting, LLC, or TRC. Certain employees of TRC, including Mr. Tanen, our former President, and Mr. Scott L. Navins, our Treasurer, perform substantial services for us, including without limitation operational, managerial, financial, clinical and regulatory activities for which we have historically paid TRC a monthly consulting fee of \$55,000 pursuant to a services agreement. While the term of the services agreement expired on April 1, 2011, we continue to utilize the services of TRC on an as needed basis. Other than the payments to TRC, we do not pay any salary or other compensation to Messrs. Tanen and Navins for their services to us.

Mr. Kazam, Mr. Tanen and Mr. Peter M. Kash, a director of Arno until April 2011, are also principals of Riverbank Capital Securities, Inc., a FINRA member broker dealer that acted as our placement agent in connection with our September 2010 and June 2008 private placements. Additionally, Mr. Navins, our Treasurer, is also the Financial and Operations Principal of Riverbank. In consideration for its services in connection with the September 2010 private placement, we paid Riverbank a placement fee of approximately \$789,880 and issued to designees of Riverbank five-year warrants to purchase an aggregate of 83,110 shares of Series A Preferred Stock at an initial exercise price of \$8.80 per share. Riverbank did not receive any selling commission for its services in connection with the June 2008 private placement, but received a non-accountable expense allowance of \$100,000.

Pursuant to a Consulting Agreement entered into between Arno and Fountainhead Capital Management Limited, we paid a \$500,000 consulting fee to Fountainhead Capital upon completion of the merger with Laurier. Fountainhead Capital Management was a significant stockholder of Laurier at the time of the merger.

WHERE YOU CAN FIND MORE INFORMATION

Federal securities laws require us to file information with the SEC concerning our business and operations. Accordingly, we file annual, quarterly, and special reports, proxy statements and other information with the SEC. You can inspect and copy this information at the Public Reference Facility maintained by the SEC at Judiciary Plaza, 100 F Street, N.E., Washington, D.C. 20549. You can receive additional information about the operation of the SEC's Public Reference Facilities by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site at http://www.sec.gov that contains reports, proxy and information statements and other information regarding companies that, like us, file information electronically with the SEC.

VALIDITY OF COMMON STOCK

Legal matters in connection with the validity of the shares offered by this prospectus will be passed upon by Fredrikson & Byron, P.A., Minneapolis, Minnesota.

EXPERTS

The financial statements as of December 31, 2012 and 2011, and for the years then ended, and for the period from August 1, 2005 (inception) through December 31, 2012, included in this prospectus, have been so included in reliance on the report of Crowe Horwath LLP, independent registered public accounting firm, given on the authority of that firm as experts in accounting and auditing.

TRANSFER AGENT

The transfer agent for our common stock is American Stock Transfer & Trust Company, and its address is 40 Wall Street, New York, New York, 10005.

DISCLOSURE OF COMMISSION POSITION ON

INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant pursuant to the foregoing provisions, the registrant has been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

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ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

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ARNO THERAPEUTICS, INC.	

(A DEVELOPMENT STAGE COMPANY)

Report of Independent Registered Public Accounting Firm

To the Board of Directors and stockholders

Arno Therapeutics, Inc.

Flemington, New Jersey

We have audited the accompanying balance sheets of Arno Therapeutics, Inc. (a development stage company) as of December 31, 2012 and 2011, and the related statements of operations, stockholders' equity, and cash flows for the years then ended and the period from August 1, 2005 (inception) through December 31, 2012. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2012 and 2011, and the results of its operations and its cash flows for the years then ended and the period from August 1, 2005 (inception) through December 31, 2012, in conformity with U.S. generally accepted accounting principles.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company is in the development stage, has not generated any revenues and has recurring net losses from operations. These events raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Crowe Horwath LLP

New York, New York

April 1, 2013, except for Note 16, as to which the date is December 27, 2013

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

BALANCE SHEETS

	December 31, 2012	December 31, 2011	
ASSETS			
Current assets			
Cash and cash equivalents	\$ 10,943,437	\$ 6,678,344	
Prepaid expenses and other current assets	203,516	296,948	
Total current assets	11,146,953	6,975,292	
Property and equipment, net	24,837	38,673	
Deferred financing fees	1,709,530	-	
Security deposit	10,455	10,455	
Total assets	\$ 12,891,775	\$ 7,024,420	
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities			
Accounts payable	\$ 1,553,154	\$ 683,161	
Accrued expenses and other current liabilities	1,652,159	1,188,041	
Due to related party	28,268	84,756	
Deferred rent	12,711	7,351	
Total current liabilities	3,246,292	1,963,309	
Convertible debentures, net	491,039	-	
Derivative liabilities	21,420,276	3,705,472	
Total liabilities	25,157,607	5,668,781	
COMMITMENTS AND CONTINGENCIES			
STOCKHOLDERS' (DEFICIT) EQUITY Preferred stock, \$0.0001 par value, 35,000,000 shares authorized,			
none issued and outstanding Common stock, \$0.0001 par value, 500,000,000 shares authorized,	-	-	
4,545,618 and 4,538,117 shares issued and outstanding	3,611	3,605	
Additional paid-in capital	37,631,339	36,865,034	
Deficit accumulated during the development stage	(49,900,782) (35,513,000)
	(.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, (22,212,000	,
Total stockholders' (deficit) equity	(12,265,832) 1,355,639	

Total liabilities and stockholders' (deficit) equity

\$ 12,891,775

\$ 7,024,420

See accompanying notes to financial statements

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF OPERATIONS

	Year ended De	Period from August 1, 2005 (inception) to	
	2012 2011		December 31, 2012
Operating expenses: Research and development General and administrative	\$8,537,130 2,298,671	\$5,690,836 1,956,115	\$ 36,845,208 9,342,612
Total operating expenses	10,835,801	7,646,951	46,187,820
Loss from operations	(10,835,801)	(7,646,951)	(46,187,820)
Other income (expense): Interest income Interest expense Other income (expense)	7,849 (6,361,029) 2,801,199	28,771 - (290,933)	414,120 (7,621,128 3,494,046
Total other income (expense)	(3,551,981)	(262,162)	(3,712,962)
Net loss	\$(14,387,782)	\$(7,909,113)	\$ (49,900,782
Preferred stock dividends	\$-	\$81,651	
Net loss available to common stockholders	\$(14,387,782)	\$(7,990,764)	
Net loss per share - basic and diluted	\$(3.17)	\$(1.85)	
Weighted-average shares outstanding -basic and diluted	4,540,320	4,314,324	

See accompanying notes to financial statements

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

STATEMENT OF STOCKHOLDERS' EQUITY (DEFICIENCY)

Period from August 1, 2005 (inception) through December 31, 2012

	PREFERRE	ED STOCK	COMMON	STOCK	ADDITIONA PAID-IN	DEFICIT ACCUMULA LDURING THI DEVELOPMI		RS'
	SHARES	AMOUN'	TSHARES	AMOUN	NTCAPITAL	STAGE	EQUITY (DEFICIT)	
Issuance of common shares to founders at \$0.0001 per share	-	\$ -	1,246,100	\$ 997	\$4,003	\$ -	\$ 5,000	
Stock based compensation for services	-	-	-	-	9,700	-	9,700	
Net loss, period from August 1, 2005 (inception) through Decembe 31, 2006	- er	-	-	-	-	(370,893) (370,893)
Balance at December 31, 2006	-	-	1,246,100	997	13,703	(370,893) (356,193)
Stock based compensation for services	-	-	-	-	88,300	-	88,300	
Net loss, year ended December 31, 2007	-	-	-	-	-	(3,359,697) (3,359,697)
Balance at December 31, 2007	-	-	1,246,100	997	102,003	(3,730,590) (3,627,590)
	-	-	920,086	736	17,689,301	-	17,690,037	

		5	•	'				
Common stock sold in private placement, net of issuance costs of \$141,646								
Conversion of notes payable upon closing of private placement	-	-	245,292	196	4,278,322	-	4,278,518	
Note discount arising from note conversion	-	-	-	-	475,391	-	475,391	
Warrants issued in connection with note conversion	-	-	-	-	348,000	-	348,000	
Reverse merger transaction - elimination of accumulated deficit	-	-	-	-	(120,648)	-	(120,648)
previously issued Laurier common stock	-	-	137,525	110	120,538	-	120,648	
Warrants issued for services	-	-	-	-	480,400	-	480,400	
Stock based compensation for services	-	-	-	-	1,131,218	-	1,131,218	
Net loss, year ended December 31, 2008						(12,913,566)	(12,913,566)
Balance at December 31, 2008	-	-	2,549,003	2,039	24,504,525	(16,644,156)	7,862,408	
Stock based compensation for services	-	-	-	-	647,448	-	647,448	
Stock option exercise	-	-	2,500	2	2,598	-	2,600	
						(6,936,705)	(6,936,705)

Net loss, year ended December 31, 2009								
Balance at December 31, 2009	-	-	2,551,503	2,041	25,154,571	(23,580,861)	1,575,751	
Stock based compensation for services	-	-	-	-	249,286	-	249,286	
Convertible preferred units issued in private placement, net of issuance costs of \$1,299,770	1,909,250	1,527	-	-	13,507,983	-	13,509,510	
Warrants issued in connection with convertible preferred units issued in private placement	-	-	-	-	(3,340,421)	-	(3,340,421)
Warrants issues to placement agents in connection with private placement	-	-	-	-	464,720	-	464,720	
Net loss, year ended December 31, 2010	-	-	-	-	-	(4,023,026)	(4,023,026)
Balance at December 31, 2010	1,909,250	1,527	2,551,503	2,041	36,036,139	(27,603,887)	8,435,820	
Stock based compensation for services	-	-	-	-	707,284	-	707,284	
Preferred stock conversion	(1,909,250)	(1,527)	1,909,250	1,527	-	-	-	
Issuance of stock dividend in connection with conversion of preferred stock	-	-	39,884	32	(32)	-	-	

Grant of restricted shares	-	-	31,250	-	115,168	-	115,168
Stock option exercise	-	-	6,231	5	6,475	-	6,480
Net loss, year ended December 31, 2011	-	-	-	-	-	(7,909,113)	(7,909,113)
Balance at December 31, 2011	-	-	4,538,118	3,605	36,865,034	(35,513,000)	1,355,639
Stock based compensation for services	-	-	-	-	722,811	-	722,811
Issuance of common shares pursuant to placement agent agreement	-	-	7,500	6	43,494	-	43,500
Net loss, year ended December 31, 2012	-	-	-	-	-	(14,387,782)	(14,387,782)
Balance at December 31, 2012	-	\$ -	4,545,618	\$ 3,611	\$37,631,339	\$ (49,900,782)	\$ (12,265,832)

See accompanying notes to financial statements

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF CASH FLOWS

Cash flavos from aparating activities	2012	2011	December 31, 2012
Cash flows from operating activities Net loss	\$(14,387,782)	\$(7,909,113)	\$ (49,900,782)
Adjustment to reconcile net loss to net cash used in operating activities			
Depreciation and amortization	13,836	11,677	114,980
Stock-based compensation	722,811	822,452	3,671,215
Change in fair value of derivative liability	(2,806,750)	•	(2,441,699)
Write-off of intangible assets	-	-	85,125
Warrants issued for services	_	_	480,400
Warrants issued in connection with note conversion	-	-	348,000
Note discount arising from beneficial conversion feature	_	_	475,391
Deferred rent	5,360	(7,397) 12,711
Loss on disposal of assets	-	2,677	5,357
Noncash interest expense	6,255,996	-	6,567,514
Changes in operating assets and liabilities			
Prepaid expenses and other current assets	93,432	(49,448	(203,516)
Restricted cash	-	44,018	-
Security deposit	_	•) (10,455)
Accounts payable	869,993	128,799	1,553,154
Accrued expenses	(130,170)	(166,926	
Due to related party	(56,488)		28,268
Net cash used in operating activities	(9,419,762)	(6,833,566)	(38,156,466)
Cash flows from investing activities			
Purchase of property and equipment	_	(23,014) (100,174)
Cash paid for intangible assets	_	-	(85,125)
Proceeds from related party advance	_	_	525,000
Repayment of related party advance	-	-	(525,000)
Net cash used in investing activities	-	(23,014) (185,299)
Cash flows from financing activities			
Proceeds from issuance of common stock to founders	-	-	5,000
Proceeds from issuance of preferred stock in private placement,			•
net	-	-	13,974,230
Proceeds from issuance of common stock in private placement, net	-	-	17,690,037

Deferred financing fees paid Proceeds from issuance of notes payable Repayment of notes payable Proceeds from issuance of convertible notes payable	(1,172,345)	- - -	(1,217,345 1,000,000 (1,000,000 3,967,000)
Proceeds from issuance of convertible debentures payable Proceeds from exercise of stock options	14,857,200	- 6,480	14,857,200 9,080	
Net cash provided by financing activities	13,684,855	6,480	49,285,202	
Net increase (decrease) in cash and cash equivalents Cash and cash equivalents at beginning of period	4,265,093 6,678,344	(6,850,100) 13,528,444	10,943,437	
Cash and cash equivalents at end of period	\$10,943,437	\$6,678,344	\$ 10,943,437	
Supplemental schedule of cash flows information:				
Cash paid for interest	\$105,034	\$-	\$ 185,034	
Supplemental schedule of non-cash investing and financing activities:				
Conversion of notes payable and interest to common stock Common shares of Laurier issued in reverse merger transaction	\$- \$-	\$- \$-	\$ 4,278,518 \$ 110	
Issuance of warrants in connection with private placement of convertible preferred units	\$- \$-	\$-	\$ 3,340,421	
Issuance of warrants in connection with private placement of convertible debentures	\$12,973,055	\$-	\$ 12,973,055	
Issuance of common stock pursuant to placement agent agreement	\$43,500	\$-	\$ 43,500	
Preferred stock dividends settled in common stock	\$-	\$319,074	\$ 319,074	

See accompanying notes to financial statements

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

NOTES TO FINANCIAL STATEMENTS

Years ended December 31, 2012 and 2011 and the period

from August 1, 2005 (inception) to December 31, 2012

1. DESCRIPTION OF BUSINESS

Arno Therapeutics, Inc. ("Arno" or the "Company") develops innovative drug candidates for the treatment of patients with cancer. The following is a summary of the Company's product development pipeline:

Onapristone – Onapristone is an anti-progestin hormone blocker that has been shown to have considerable anti-tumor activity in patients with breast cancer. In prior clinical studies, onapristone has demonstrated a 56% objective response rate as a first line "hormone" treatment of breast cancer. In connection with the development of onapristone, the Company intends to develop a companion diagnostic product to selectively identify patients who express the activated form of the progesterone receptor and therefore may be more likely to benefit from treatment with onapristone. The Company is currently conducting pre-clinical toxicology studies and manufacturing activities and plans to file an investigational new drug application ("IND") or foreign equivalent in 2013.

AR-42 – AR-42 is an orally available, broad spectrum inhibitor of both histone and non-histone deacetylation proteins, or Pan-DAC, which play an important role in the regulation of gene expression, cell growth and survival. •AR-42 is currently being studied in an investigator-initiated Phase I/II clinical study in adult subjects with relapsed or refractory multiple myeloma, chronic lymphocytic leukemia (CLL), or lymphoma. The protocol has been amended to include a solid tumor dose escalation cohort which is currently open for patient enrollment.

AR-12 – AR-12 is a potentially first-in-class, orally available, targeted anti-cancer agent that has been shown in pre-clinical studies to inhibit phosphoinositide dependent protein kinase-1, or PDK-1, a protein in the PI3K/Akt pathway that is involved in the growth and proliferation of cells, including cancer cells. AR-12 has also been reported to cause cell death through the induction of endoplasmic reticulum stress and work is ongoing to further understand the mechanism of action. The Company is currently conducting a multi-centered Phase I clinical study of AR-12 in adult subjects with advanced or recurrent solid tumors or lymphoma.

The Company was incorporated in Delaware in March 2000 under the name Laurier International, Inc. ("Laurier"). Pursuant to an Agreement and Plan of Merger dated March 6, 2008 (as amended, the "Merger Agreement"), by and among the Company, Arno Therapeutics, Inc., a Delaware corporation formed on August 1, 2005 ("Old Arno"), and

Laurier Acquisition, Inc., a Delaware corporation and wholly-owned subsidiary of the Company ("Laurier Acquisition"), on June 3, 2008, Laurier Acquisition merged with and into Old Arno, with Old Arno remaining as the surviving corporation and a wholly-owned subsidiary of Laurier. Immediately following this merger, Old Arno merged with and into Laurier and Laurier's name was changed to Arno Therapeutics, Inc. These two merger transactions are hereinafter collectively referred to as the "Merger." Immediately following the Merger, the former stockholders of Old Arno collectively held 95% of the outstanding common stock of Laurier, assuming the issuance of all shares issuable upon the exercise of outstanding options and warrants, and all of the officers and directors of Old Arno in office immediately prior to the Merger were appointed as the officers and directors of Laurier immediately following the Merger. Further, Laurier was a non-operating shell company prior to the Merger. The merger of a private operating company into a non-operating public shell corporation with nominal net assets is considered to be a capital transaction in substance, rather than a business combination, for accounting purposes. Accordingly, the Company treated this transaction as a capital transaction without recording goodwill or adjusting any of its other assets or liabilities. All costs incurred in connection with the Merger have been expensed. Upon completion of the Merger, the Company adopted Old Arno's business plan.

2. LIQUIDITY AND CAPITAL RESOURCES

The Company is a development stage enterprise since it has not yet generated any revenue from the sale of products and, through December 31, 2012, its efforts have been principally devoted to developing its licensed technologies, recruiting personnel, establishing office facilities, and raising capital. Accordingly, the accompanying financial statements have been prepared in accordance with the provisions of Accounting Standards Codification ("ASC") 915, "Development Stage Entities." The Company has experienced net losses since its inception and has an accumulated deficit of approximately \$49.9 million at December 31, 2012. The Company expects to incur substantial and increasing losses and have negative net cash flows from operating activities as it expands its technology portfolio and engages in further research and development activities, particularly the conducting of pre-clinical and clinical trials.

Cash resources as of December 31, 2012 were approximately \$10.9 million, compared to \$6.7 million as of December 31, 2011. Based on its resources at December 31, 2012 and the current plan of expenditure on continuing development of the Company's current product candidates, the Company believes that it has sufficient capital to fund its operations through approximately the third quarter of 2013. However, the Company will need substantial additional financing in the future until it can achieve profitability, if ever. The Company's continued operations will depend on its ability to raise additional funds through various potential sources, such as equity and debt financing, or to license its product candidates to another pharmaceutical company. The Company will continue to fund operations from cash on hand and through sources of capital similar to those previously described. The Company cannot assure that it will be able to secure such additional financing, or if available, that it will be sufficient to meet its needs.

The success of the Company depends on its ability to discover and develop new products to the point of FDA approval and subsequent revenue generation and, accordingly, to raise enough capital to finance these developmental efforts. Management plans to raise additional equity capital or license one or more of its products to finance the continued operating and capital requirements of the Company. Amounts raised will be used to further develop the Company's products, acquire additional product licenses and for other working capital purposes. While the Company will extend its best efforts to raise additional capital to fund all operations for the next 12 to 24 months, management can provide no assurances that the Company will be able to raise sufficient funds.

These factors raise substantial doubt about the Company's ability to continue as a going concern. The Company's financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The financial statements do not include any adjustments that might result from the inability of the Company to continue as a going concern.

3. THE MERGER AND BASIS OF PRESENTATION

The accompanying audited financial statements of the Company have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and the instructions to Form 10-K promulgated by the Securities and Exchange Commission ("SEC").

(a) Description of the Merger and Private Placement Offering

The Company completed the Merger on June 3, 2008. In accordance with the terms of the Merger, each share of common stock of Old Arno that was outstanding immediately prior to the Merger was exchanged for 0.24922 shares of the Company's common stock. In addition, all securities convertible into or exercisable for shares of Old Arno common stock outstanding immediately prior to the Merger were cancelled, and the holders thereof received similar securities convertible into or exercisable for the purchase of an aggregate of 201,470 shares of the Company's common stock. In consideration for their shares of the Company's pre-merger common stock, the Company's shareholders received an aggregate of 2,411,410 shares of Laurier common stock. Immediately prior to the effective time of the Merger, 137,525 shares of Laurier's common stock were issued and outstanding. Upon completion of the Merger, the Old Arno shareholders owned approximately 95% of the Company's issued and outstanding common stock, assuming the exercise of all of the issued and outstanding common stock options and warrants.

Following the Merger, the business conducted by the Company is the business conducted by Old Arno prior to the Merger. In addition, the directors and officers of Laurier were replaced by the directors and officers of Old Arno.

As a condition and immediately prior to the closing of the Merger, on June 2, 2008, Old Arno completed a private placement of its equity securities whereby it received gross proceeds of approximately \$17,732,000 through the sale of approximately 461,487 shares of Old Arno Common Stock to selected accredited investors, which shares were exchanged for approximately 920,087 shares of Company Common Stock after giving effect to the Merger. Contemporaneously with the June 2008 private placement, the Old Arno's outstanding 6% Notes (defined below) converted into 123,030 shares of Old Arno's common stock and the holders of the Notes received warrants to purchase an aggregate of 12,301 shares of Old Arno common stock at an exercise price equal to \$38.64 per share. The shares issued upon conversion were exchanged for an aggregate of approximately 245,292 shares of the Company's Common Stock and the warrants were exchanged for five-year warrants to purchase an aggregate of approximately 24,523 shares of the Company's Common Stock at an exercise price equal to \$19,36 per share. See "Note 8. Convertible Debentures and Notes Payable."

All references to share and per share amounts in these financial statements have been restated to retroactively reflect the number of common shares of Arno common stock issued pursuant to the Merger.

(b) Accounting Treatment of the Merger; Financial Statement Presentation

The Merger was accounted for as a reverse acquisition pursuant to Accounting Standards Codification ("ASC") 805-40-25, which provides that the "merger of a private operating company into a non-operating public shell corporation with nominal net assets typically results in the owners and management of the private company having actual or effective operating control of the combined company after the transaction, with the shareholders of the former public shell continuing only as passive investors. These transactions are considered by the Securities and Exchange Commission to be capital transactions in substance, rather than business combinations. That is, the transaction is equivalent to the issuance of stock by the private company for the net monetary assets of the shell corporation, accompanied by a recapitalization." Accordingly, the Merger has been accounted for as a recapitalization, and, for accounting purposes, Old Arno is considered the acquirer in a reverse acquisition.

Laurier's historical accumulated deficit for periods prior to June 3, 2008, in the amount of \$120,538, was eliminated against additional-paid-in-capital, and the accompanying financial statements present the previously issued shares of Laurier common stock as having been issued pursuant to the Merger on June 3, 2008. The shares of common stock of the Company issued to the Old Arno stockholders in the Merger are presented as having been outstanding since August 2005 (the month when Old Arno first sold its equity securities).

Because the Merger was accounted for as a reverse acquisition under GAAP, the financial statements for periods prior to June 3, 2008 reflect only the operations of Old Arno.

4. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Use of Estimates

The preparation of financial statements in conformity with GAAP requires that management 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 revenues and expenses during the reporting periods. Estimates and assumptions principally relate to services performed by third parties but not yet invoiced, estimates of the fair value and forfeiture rates of stock options issued to employees, directors and consultants, valuation of derivatives and estimates of the probability and potential magnitude of contingent liabilities. Actual results could

differ from those estimates.

(b) Cash and Cash Equivalents

The Company considers all highly liquid investments with a remaining maturity of three months or less at the time of acquisition to be cash equivalents.

(c) Deferred Financing Fees

Finance costs relating to debt issued are recorded as a deferred charge and amortized to interest expense over the expected term of the debt using the effective interest method.

(d) Prepaid Expenses

Prepaid expenses consist of payments made in advance to vendors relating to service contracts for clinical trial development, insurance policies and license fees. These advanced payments are amortized to expense either as services are performed or over the relevant service period using the straight line method.

(e) Property and Equipment

Property and equipment consist primarily of furnishings, fixtures, leasehold improvements and computer equipment and are recorded at cost. Repairs and maintenance costs are expensed in the period incurred. Depreciation of property and equipment is provided for by the straight-line method over the estimated useful lives of the related assets. Leasehold improvements are amortized using the straight-line method over the remaining lease term or the life of the asset, whichever is shorter.

Description Estimated Useful Life

Office equipment and furniture 5 to 7 years Leasehold improvements 3 years Computer equipment 3 years

(f) Fair Value of Financial Instruments

The Company measures fair value in accordance with generally accepted accounting principles. Fair value measurements are applied under other accounting pronouncements that require or permit fair value measurements. Financial instruments included in the Company's balance sheets consist of cash and cash equivalents, accounts payable, accrued expenses, due to related parties, and warrant liability. The carrying amounts of these instruments reasonably approximate their fair values due to their short-term maturities.

(g) Convertible Debentures and Warrant Liability

The Company accounts for the convertible debentures and warrants issued in connection with the 2012 Purchase Agreement (see Note 8) and for the warrants issued in connection with the 2010 Purchase Agreement (see Note 10) in accordance with the guidance on Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity, which provides that the Company classify the warrant instrument as a liability at its fair value and adjusts the instrument to fair value at each reporting period. This liability is subject to re-measurement at each balance sheet date until exercised, and any change in fair value is recognized as a component of other income or expense. The fair value of warrants issued by the Company, in connection with private placements of securities, has been estimated using a Monte Carlo simulation model and, in doing so, the Company's management utilized a third-party valuation report. The Monte Carlo simulation is a generally accepted statistical method used to generate a defined number of stock price paths in order to develop a reasonable estimate of the range of the Company's future expected stock prices and minimizes standard error.

(h) Concentration of Credit Risk

Financial instruments which potentially subject the Company to concentrations of credit risk consist principally of cash and cash equivalents. The Company deposits cash and cash equivalents with high credit quality financial institutions and is insured to the maximum limitations. Balances in these accounts may exceed federally insured limits at times, which expose the Company to institutional risk.

(i) Research and Development

Research and development costs are charged to expense as incurred. Research and development includes employee costs, fees associated with operational consultants, contract clinical research organizations, contract manufacturing organizations, clinical site fees, contract laboratory research organizations, contract central testing laboratories, licensing activities, and allocated executive, human resources and facilities expenses. The Company accrues for costs incurred as the services are being provided by monitoring the status of the trial and the invoices received from its external service providers. As actual costs become known, the Company adjusts its accruals in the period when actual costs become known. Costs related to the acquisition of technology rights and patents for which development work is still in process are charged to operations as incurred and considered a component of research and development expense.

(j) Stock-Based Compensation

Stock-based compensation cost is measured at the grant date based on the value of the award and is recognized as expense over the required service period, which is generally equal to the vesting period. Share-based compensation is recognized only for those awards that are ultimately expected to vest.

Common stock, stock options or other equity instruments issued to non-employees (including consultants and all members of the Company's Scientific Advisory Board) as consideration for goods or services received by the Company are accounted for based on the fair value of the equity instruments issued (unless the fair value of the consideration received can be more reliably measured). The fair value of stock options is determined using the Black-Scholes option-pricing model. The fair value of any options issued to non-employees is recorded as expense over the applicable service periods.

(k) Loss per Common Share

Basic loss per share is computed by dividing the loss available to common shareholders by the weighted-average number of common shares outstanding. Diluted loss per share is computed similarly to basic loss per share except that the denominator is increased to include the number of additional common shares that would have been outstanding if the potential common shares had been issued and if the additional common shares were dilutive.

	For the Year Ended December 31, 2012			2011		
	Loss	Shares	Per Share	Loss	Shares	Per Share
Net loss Less: Preferred stock dividends	(Numerator) \$(14,387,782)	(Denominator)	Amount	(Numerator) \$(7,909,113) (81,651)	(Denominator)	Amount
Basic and Diluted EPS Loss available to common stockholders	\$(14,387,782)	4,540,320	\$ (3.17)	\$(7,990,764)	4,314,324	\$ (1.85)

For all periods presented, potentially dilutive securities are excluded from the computation of fully diluted loss per share as their effect is anti-dilutive.

Potentially dilutive securities include:

For the year ended December 31, 2012 and 2011, 20,726,257 and 1,977,217 shares of warrants, options and shares issuable under convertible debentures have been excluded from the computation of potentially dilutive securities, respectively, as their conversion and/or exercise prices are greater than the fair market price per common share as of December 31, 2012 and 2011, respectively.

(l) Comprehensive Loss

The Company has no components of other comprehensive loss other than its net loss, and accordingly, comprehensive loss is equal to net loss for all periods presented.

(m) Income Taxes

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred income taxes are recognized for the tax consequences in future years of differences between the tax bases of assets and liabilities and their financial reporting amounts at each year-end based on enacted tax laws and statutory tax rates applicable to the period in which the differences are expected to affect taxable income. The Company provides a valuation allowance when it appears more likely than not that some or all of the net deferred tax assets will not be realized.

A tax position is recognized as a benefit only if it is "more likely than not" that the tax position would be sustained in a tax examination, with a tax examination being presumed to occur. The amount recognized is the largest amount of tax benefit that is greater than 50% likely of being realized on examination. For tax positions not meeting the "more likely than not" test, no tax benefit is recorded.

The Company's policy is to include interest and penalties related to unrecognized tax benefits within the Company's provision for (benefit from) income taxes. The Company recognized no amounts for interest and penalties related to unrecognized tax benefits in 2012 and 2011 respectively. In addition, the Company had no amounts accrued for interest and penalties as of December 31, 2012 and 2011, respectively.

(n) Recently Issued Accounting Pronouncements

In May 2011, the Financial Accounting Standards Board ("FASB") issued additional guidance relating to fair value measurement and disclosure requirements. For fair value measurements categorized in Level 3 of the fair value hierarchy, the new guidance requires (1) disclosure of quantitative information about unobservable inputs; (2) a description of the valuation processes used by the entity; and (3) a qualitative discussion about the sensitivity of the fair value measurements to changes in unobservable inputs and interrelationships between those unobservable inputs, if any. Entities must report the level in the fair value hierarchy of assets and liabilities that are not recorded at fair value in the statement of financial position but for which fair value is disclosed. The new requirements clarify that the concepts of highest and best use and valuation premise only apply to measuring fair value of nonfinancial assets. The new requirements also specify that in the absence of a Level 1 input, a reporting entity should incorporate a premium or discount in a fair value measurement if a market participant would take into account such an input in pricing an asset or liability. Additionally, the new guidance introduces an option to measure certain financial assets and financial liabilities with offsetting positions on a net basis if certain criteria are met. For public entities, these new requirements become effective for interim and annual periods beginning on or after December 15, 2011. These requirements are applicable to our fiscal year beginning January 1, 2012. The adoption of this new guidance did not have a material effect on the Company's financial statements.

Management does not believe that any other recently issued, but not yet effective, accounting pronouncements, if currently adopted, would have a material effect on the Company's financial statements.

5. PROPERTY AND EQUIPMENT

Property and equipment as of December 31, 2012 and 2011 consist of the following:

	2012	2011
Computer equipment and software	\$17,721	\$17,721
Office furniture and equipment	52,242	52,242
Leasehold improvements	8,449	8,449
Total property and equipment	78,412	78,412
Accumulated depreciation	(53,575)	(39,739)
Total property and equipment, net	\$24,837	\$38,673

Depreciation expense for the years ended December 31, 2012, 2011, and the period from August 1, 2005 (inception) through December 31, 2012, was \$13,836, \$11,677 and \$69,979, respectively.

6. INTANGIBLE ASSETS AND INTELLECTUAL PROPERTY

(a) Onapristone License Agreement

The Company's rights to onapristone are governed by a license agreement with Invivis Pharmaceuticals, Inc. ("Invivis"), dated February 13, 2012. Under this agreement, the Company holds an exclusive, royalty-bearing license for the rights to commercialize onapristone for all therapeutic uses. The license agreement provides the Company with worldwide rights to onapristone with the exception of France; provided, however, that the Company has an option to acquire French commercial rights from Invivis upon notice to Invivis together with a cash payment.

The onapristone license agreement provides the Company with exclusive, worldwide rights to a U.S. provisional patent application that relates to assays for predictive biomarkers for anti-progestin efficacy. The Company intends to expand its patent portfolio by filing additional patent applications covering the use of onapristone and/or a companion diagnostic product. If the pending patent application issues, the issued patent would be scheduled to expire in 2031.

The Company made a one-time cash payment of \$500,000 to Invivis upon execution of the license agreement on February 13, 2012. Additionally, Invivis will receive performance-based cash payments of up to an aggregate of \$15.1 million upon successful completion of clinical and regulatory milestones relating to onapristone, which milestones include the marketing approval of onapristone in multiple indications in the United States or the European Union as well as Japan. The Company will make the first milestone payment to Invivis upon the dosing of the first subject in the first company sponsored Phase 1 clinical trial of onapristone, which is anticipated in the third quarter of 2013. In addition, the Company will pay Invivis low single digit sales royalties based on net sales of onapristone by the Company or any of its sublicensees. Pursuant to a separate services agreement, Invivis will provide the Company with certain clinical development support services, which includes the assignment of up to two full-time employees to perform such services, in exchange for a monthly cash payment.

Under the license agreement with Invivis, the Company also agreed to indemnify and hold Invivis and its affiliates harmless from any and all claims arising out of or in connection with the production, manufacture, sale, use, lease, consumption or advertisement of onapristone, provided, however, that the Company shall have no obligation to indemnify Invivis for claims that (a) any patent rights infringe third party intellectual property, (b) arise out of the gross negligence or willful misconduct of Invivis, or (c) result from a breach of any representation, warranty confidentiality obligation of Invivis under the license agreement. The license agreement will terminate upon the later of (i) the last to expire valid claim contained in the patent rights, and (ii) February 13, 2032. In general, Invivis may terminate the license agreement at any time upon a material breach by the Company to the extent the Company fails to cure any such breach within 90 days after receiving notice of such breach or in the event the Company files for bankruptcy. The Company may terminate the agreement for any reason upon 90 days' prior written notice.

(b) AR-12 and AR-42 License Agreements

The Company's rights to both AR-12 and AR-42 are governed by separate license agreements with The Ohio State University Research Foundation ("Ohio State") entered into in January 2008. Pursuant to each of these agreements, Ohio State granted the Company exclusive, worldwide, royalty-bearing licenses to commercialize certain patent applications, know-how and improvements relating to AR-42 and AR-12 for all therapeutic uses.

Pursuant to the Company's license agreements for AR-12 and AR-42, the Company made one-time cash payments to Ohio State in the aggregate amount of \$450,000 and reimbursed it for past patent expenses in the aggregate amount of approximately \$174,000. Additionally, the Company will be required to make performance-based cash payments upon successful completion of clinical and regulatory milestones relating to AR-12 and AR-42 in the United States, Europe and Japan. The first milestone payment for each of the licensed compounds will be due when the first patient is dosed in the first Company sponsored Phase I clinical trial of each of AR-12 and AR-42. In October 2009, the Company remitted a milestone payment to Ohio State for the first patient dosed in the first Company sponsored Phase I clinical trial of AR-12. To the extent the Company enters into a sublicensing agreement relating to either or both of AR-12 or AR-42, it will be required to pay Ohio State a portion of all non-royalty income received from such sublicensee. The Company made no milestone payments under these license agreements during 2012. The Company does not expect to make any milestone payments under these agreements during 2013.

The license agreements with Ohio State further provide that the Company will indemnify Ohio State from any and all claims arising out of the death of or injury to any person or persons or out of any damage to property, or resulting from the production, manufacture, sale, use, lease, consumption or advertisement of either AR-12 or AR-42, except to the extent that any such claim arises out of the gross negligence or willful misconduct of Ohio State. The license agreements for AR-12 and AR-42 each expire on the later of (i) the expiration of the last valid claim contained in any licensed patent and (ii) 20 years after the effective date of the license. Ohio State will generally be able to terminate either license upon the Company's breach of the terms of the license to the extent the Company fails to cure any such breach within 90 days after receiving notice of such breach or the Company files for bankruptcy. The Company may terminate either license upon 90 days prior written notice.

(c) AR-67 License Agreement

The Company's rights to AR-67 were governed by an October 2006 license agreement with the University of Pittsburgh ("Pitt"). Under this agreement, Pitt granted the Company an exclusive, worldwide, royalty-bearing license for the rights to commercialize technologies embodied by certain issued patents, patent applications and know-how relating to AR-67 for all therapeutic uses.

Under the terms of the license agreement with Pitt, the Company made a one-time cash payment of \$350,000 to Pitt and reimbursed it for past patent expenses of approximately \$373,000. Additionally, Pitt was entitled to receive performance-based cash payments upon successful completion of clinical and regulatory milestones relating to AR-67. The Company would have made the first milestone payment to Pitt upon the acceptance of the first new drug application by the FDA for AR-67. The Company was also required to pay to Pitt an annual maintenance fee of \$200,000 upon the third and fourth anniversaries, \$250,000 upon the fifth and sixth anniversaries, and \$350,000 upon the seventh anniversary and annually thereafter and to pay Pitt a royalty equal to a percentage of net sales of AR-67, pursuant to the license agreement. The Company did not have any milestone payment obligations during 2012 under this license agreement.

Under the license agreement with Pitt, the Company also agreed to indemnify and hold Pitt and its affiliates harmless from any and all claims, actions, demands, judgments, losses, costs, expenses, damages and liabilities (including reasonable attorneys' fees) arising out of or in connection with (i) the production, manufacture, sale, use, lease, consumption or advertisement of AR-67, (ii) the practice by the Company or any affiliate or sublicensee of the licensed patent; or (iii) any obligation of the Company under the license agreement unless any such claim is determined to have arisen out of the gross negligence, recklessness or willful misconduct of Pitt.

In January 2012, Pitt provided notice to the Company that it was in default of the terms of the license agreement for failing to pay the \$250,000 annual maintenance fee. In March 2012, following the Company's determination not to proceed with further development of AR-67, the parties agreed to terminate the license agreement. As a result, the Company no longer has rights in AR-67; however, the Company retains ownership of all data accumulated during the Company's development of AR-67. On March 28, 2013, the Company entered into a settlement agreement with Pitt pursuant to which the Company agreed to make a one-time payment of \$235,000 in full satisfaction of all obligations under the license agreement with Pitt. See Note 16. Subsequent Events.

7. ACCRUED LIABILITIES

Accrued liabilities as of December 31, 2012 and 2011 consist of the following:

	2012	2011
Accrued compensation and related benefits	\$304,772	\$272,342
Accrued research and development expense Accrued liquidated damages	713,099 594,288	915,699 -
Accrued other expense	40,000	_
Total accrued liabilities	\$1,652,159	\$1,188,041

8. CONVERTIBLE DEBENTURES AND NOTES PAYABLE

On November 26, 2012, the Company entered into a Securities Purchase Agreement, or the 2012 Purchase Agreement, with a number of institutional and accredited investors pursuant to which the Company sold in a private placement an aggregate principal amount of \$14,857,200 of three-year 8% Senior Convertible Debentures, or the Debentures. In accordance with the 2012 Purchase Agreement, as amended on December 13, 2012, the Company also issued five-year Series A warrants to purchase an aggregate of 6,190,486 shares of common stock at an initial exercise price of \$4.00 per share and 18-month Series B warrants to purchase an aggregate of 6,190,486 shares of common stock at an initial exercise price of \$2.40 per share. The sale of the Debentures and 2012 Warrants, which occurred in two closings on November 26, 2012 and December 18, 2012, resulted in aggregate gross proceeds of approximately \$14.9 million, before deducting placement agent fees and other transaction-related expenses of approximately \$1.2 million. The 2012 Warrants were valued at \$12,430,525 (see Note 9).

The conversion price of the Debentures is subject to a "full-ratchet" anti-dilution provision, such that in the event the Company makes an issuance of common stock (subject to customary exceptions) at a price per share less than the applicable exercise price of the Debentures, the applicable conversion price will be reduced to the price per share applicable to such new issuance. However, after such time as the Company has raised at least \$12 million in subsequent equity financings, the conversion price of the Debentures will be subject to a customary weighted-average price adjustment with respect to new issuances. This conversion feature of the Debentures is considered an embedded derivative and was accounted for separately from the Debentures and was valued at \$7,548,500 (see Note 9).

Pursuant to the terms of a Registration Rights Agreement entered into on November 26, 2012 in connection with the Company's entry into the 2012 Purchase Agreement, the Company agreed to file a registration statement under the Securities Act of 1933, as amended, covering the resale of: (i) 100% of the shares of common stock issuable as

payment of accrued interest under the Debentures and upon exercise of the Series A Warrants; and (ii) 150% of the shares of common stock issuable upon conversion of the Debentures and upon exercise of the Series B Warrants (collectively, the "Registrable Securities"). The Company further agreed to cause such registration statement to be filed with 30 days following the date of the Registration Rights Agreement, or by December 26, 2012, and to cause such registration statement to be declared effective within 60 days following the date of the Registration Rights Agreement, or by January 25, 2013, or, if the registration statement was subject to review by the SEC, to cause such registration statement to be declared effective within 120 days following the date of the Registration Rights Agreement, or by March 26, 2013. If such registration statement, covering 100% of the Registrable Securities, was not declared effective by the SEC by the applicable date, the Company agreed to pay liquidated damages to the investors in the amount of 2% of each investor's aggregate investment amount per month until the registration statement is declared effective or until such earlier time as the Registrable Securities may be traded pursuant to Rule 144. On March 25, 2013, the Company and holders of over two-thirds of the Debentures entered into an amendment to the Registration Rights Agreement, permitting the Company, in its sole discretion, to elect to pay such liquidated damages by issuing shares of common stock in lieu of cash (see Note 16).

The Company filed the registration statement on December 26, 2012, and, following the receipt of comments from the SEC on January 7, 2013, the Company filed an amendment to the registration statement on January 29, 2013. As of the date of this report, the registration statement has not been declared effective by the SEC, and the Company does not anticipate being able to register 100% of the Registrable Securities. Accordingly, because the registration statement was not declared effective by March 26, 2013, the investors are each entitled to liquidated damages in the amount of 2% of their investment amount per month until the Registrable Securities may be traded pursuant to Rule 144. Because Rule 144 will become available to the investors six months after the applicable closing date, the investors will be entitled to approximately two months' of liquidated damages, or approximately \$0.6 million in the aggregate.

9. FAIR VALUE OF FINANCIAL INSTRUMENTS

The Company defines fair value as the amount at which an asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. The fair value estimates presented in the table below are based on information available to the Company as of December 31, 2012.

The accounting standard regarding fair value measurements discusses valuation techniques, such as the market approach (comparable market prices), the income approach (present value of future income or cash flow), and the cost approach (cost to replace the service capacity of an asset or replacement cost). The standard utilizes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The following is a brief description of those three levels:

· Level 1: Observable inputs such as quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly.

These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.

Level 3: Unobservable inputs that reflect the reporting entity's own assumptions.

The Company has determined the fair value of certain liabilities using the market approach: the following tables present the Company's fair value hierarchy for these assets measured at fair value on a recurring basis as of December 31, 2012 and 2011:

	Fair Value December 31, 2012	Quoted Market Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Liabilities Warrant liability - 2010 Series A&F Debenture conversion feature -2012 Warrant liability - 2012 placement agent Warrant liability - 2012 Series A&F	7,548,500 542,530	\$ - - -	\$ - - -	\$ 898,722 7,548,500 542,530 12,430,525
Total	\$ 21,420,277	\$ -	\$ -	\$ 21,420,277
	Fair Value December 31, 2011	Quoted Market Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Liabilities Warrant liability - 2010 Series A&B	\$ 3,705,472	\$ -	\$ -	\$ 3,705,472
Total	\$ 3,705,472	\$ -	\$ -	\$ 3,705,472

The fair value of these derivative liabilities was estimated by management using a third party valuation report. The third-party estimated the value of the warrants using a Monte Carlo simulation model. The Monte Carlo simulation is a generally accepted statistical method used to generate a defined number of stock price paths in order to develop a reasonable estimate of the range of our future expected stock prices and minimizes standard error. The changes in the fair value of these derivative liabilities are estimated quarterly after issuance and are recorded in other income (expense) on the statement of operations.

The following table provides a summary of changes in fair value of the Company's liabilities, as well as the portion of losses included in income attributable to unrealized appreciation that relate to those liabilities held at December 31, 2012:

Fair Value Measurements Using Significant Unobservable Inputs (Level 3)

Significant Unobservable inputs (Leve	13)		
	Warrant Liabili	lity	
Balance at January 1, 2011	\$ (3,420,780)	
Purchases, sales and settlements:			
Warrants issued	-		
Total gains or losses:			
Unrealized depreciation	(284,692)	
Balance at January 1, 2012	(3,705,472)	
Purchases, sales and settlements:			
Warrants and other derivatives issued	(20,521,555)	
Total gains or losses:			
Unrealized depreciation	2,806,750		
Balance at December 31, 2012	\$ (21,420,277)	

Significant assumptions used at December 31, 2012 and 2011 for the warrants and embedded conversion discount derivative liability of the Debentures are as follows:

Weighted average term	3 years	4 years		
Volatility	200	%	120	%
Risk-free interest rate	1.05	%	0.83	%

10. STOCKHOLDERS' EQUITY

(a) Common Stock

On November 21, 2012, the Company amended its Amended & Restated Certificate of Incorporation to increase the number of shares of common stock that the Company is authorized to issue from 80,000,000 shares to 500,000,000 shares.

On April 25, 2011, the Company issued 31,250 shares of restricted common stock under the Company's 2005 Stock Option Plan to its new Chief Executive Officer pursuant to his employment agreement. These shares vested in 12 equal monthly installments and have a total fair value of \$172,750, or \$5.53 per share, as estimated by management using a Monte Carlo simulation model using the significant assumptions described below in addition to a discount for the restrictions and, in doing so, utilizing a third-party valuation report. The shares are recognized as compensation expense upon vesting. The Shares are recognized as compensation expense upon vesting. The Company has recognized \$57,584, \$115,168 and \$172,572 of compensation expense for the years ended December 31, 2012, 2011 and the period from inception to December 31, 2012, respectively, in connection with the restricted shares.

On February 9, 2011, the Company issued an aggregate of 1,909,250 shares of its common stock upon the automatic conversion of all 1,909,250 of its issued and outstanding shares of Series A Convertible Preferred Stock. In accordance with their terms, the shares Series A Convertible Preferred Stock automatically converted upon the effectiveness of the Company's registration statement covering the resale under the Securities Act of 1933 of the shares of common stock issuable upon conversion of such preferred shares. See Note 10(b) Preferred Stock,. In addition, the Company elected to satisfy accrued dividends on the Series A Convertible Preferred Stock of \$319,074 by issuing an additional 39,884 shares of common stock.

On November 15, 2010, the Company's stockholders authorized the amendment of the Company's amended and restated certificate of incorporation in order to effect a combination (reverse split) of its common stock at a ratio not to

exceed one-for-eight, provided that the Company's board of directors shall have absolute discretion to determine and fix the exact ratio of such combination (not to exceed one-for-eight) and the time at which such combination shall become effective, if ever. The Company's board of directors has taken no further action to implement a combination of our common stock and reserves the right to abandon the proposed reverse stock split in its sole discretion.

As of December 31, 2012, the Company has 4,545,618 shares of common stock issued and outstanding and an additional 14,535,756 shares of common stock reserved for issuance upon the exercise of outstanding options and warrants.

(b) Preferred Stock

On August 11, 2010, the Company amended and restated its certificate of incorporation, increasing the number of shares of preferred stock authorized for issuance thereunder from 10,000,000 to 35,000,000.

On September 3, 2010, the Company entered into a Securities Purchase and Registration Rights Agreement (the "2010 Purchase Agreement"), with a number of institutional and other accredited investors pursuant to which the Company sold in a private placement an aggregate of 1,909,250 shares of newly-designated Series A Convertible Preferred Stock, par value \$0.0001 per share, or Series A Preferred Stock, at a per share purchase price of \$1.00. In accordance with the 2010 Purchase Agreement, the Company also issued two-and-one-half-year Class A warrants to purchase an aggregate of 152,740 shares of Series A Preferred Stock at an initial exercise price of \$8.00 per share and five-year Class B warrants to purchase an aggregate of 801,885 shares of Series A Preferred Stock at an initial exercise price of \$9.20 per share. The terms of the Class A and Class B warrants contain an anti-dilutive price adjustment provision, such that, in the event the Company issues common shares at a price below the current exercise price of the warrants, the exercise price of the Class A and Class B warrants will be adjusted based on the lower issuance price. The sale of the shares and warrants resulted in aggregate gross proceeds of approximately \$15.3 million, before expenses.

The terms, conditions, privileges, rights and preferences of the Series A Convertible Preferred Stock are described in a Certificate of Designation filed with the Secretary of State of Delaware on September 3, 2010.

Each share of Series A Preferred Stock was initially convertible at the holder's election into one share of common stock. Upon the effective date of the registration statement on February 9, 2011, each share of Series A Preferred Stock automatically converted into one share of common stock. In addition, all outstanding warrants to purchase Series A Preferred Stock automatically converted into warrants to purchase common stock.

Issuance costs related to the financing were approximately \$1.8 million, of which approximately \$0.5 million was non-cash for issuance of warrants ("Placement Warrants") to purchase 132,116 shares of the Company's common stock at 110% of the Series A Preferred Stock purchase price per share to designees of Riverbank Capital Securities, Inc. ("Riverbank"), a related party controlled by several officers and/or directors of the Company (see Note 12), and I-Bankers Securities, Inc. ("IBS"), that acted as placement agents for the Company in connection with the private placement.

On February 9, 2011, the Company's registration statement was declared effective and the 1,909,250 shares of Series A Convertible Preferred Stock converted into 1,909,250 shares of common stock. In addition, the Company elected to pay the \$319,074 in accrued dividends in shares of common stock resulting in the issuance of 39,884 shares.

(c) Warrants

In accordance with the 2010 Purchase Agreement, the Company issued two-and-one-half-year Class A warrants to purchase an aggregate of 152,740 shares of Series A Preferred Stock at an initial exercise price of \$8.00 per share and five-year Class B warrants to purchase an aggregate of 801,885 shares of Series A Preferred Stock at an initial exercise price of \$9.20 per share. As noted above, all outstanding warrants to purchase shares of Series A Preferred Stock automatically converted into warrants to purchase common stock on February 9, 2011, when the Company's registration statement was declared effective. The terms of the warrants contain an anti-dilutive price adjustment provision, such that, in the event the Company issues common shares at a price below the current exercise price of the warrants, the exercise price will be adjusted based on the lower issuance price. Because of this anti-dilution provision and the inherent uncertainty as to the probability of future common share issuances, the Black-Scholes option pricing model the Company uses for valuing stock options could not be used. Management used a Monte Carlo simulation model and, in doing so, utilized a third-party valuation report to determine the warrant liability to be approximately \$0.9 million and approximately \$3.7 million at December 31, 2012 and 2011, respectively. The Monte Carlo simulation is a generally accepted statistical method used to generate a defined number of stock price paths in order to develop a reasonable estimate of the range of the Company's future expected stock prices and minimizes standard error. This valuation is revised on a quarterly basis until the warrants are exercised or they expire with the changes in fair value recorded in other expense on the statement of operations.

Pursuant to the 2012 Purchase Agreement, the Company issued five-year Series A warrants to purchase an aggregate of 6,190,486 shares of common stock at an initial exercise price of \$4.00 per share and 18-month Series B warrants to purchase an aggregate of 6,190,486 shares of common stock at an initial exercise price of \$2.40 per share. The terms of the warrants contain an anti-dilutive price adjustment provision, such that, in the event the Company issues common shares at a price below the current exercise price of the warrants, the exercise price will be adjusted based on the lower issuance price. Because of this anti-dilution provision and the inherent uncertainty as to the probability of future common share issuances, the Black-Scholes option pricing model the Company uses for valuing stock options could not be used. Management used a Monte Carlo simulation model and, in doing so, utilized a third-party valuation report to determine the warrant liability to be approximately \$12.4 million at December 31, 2012

In connection with the 2012 offering of Debentures and Warrants, the Company engaged Maxim Group LLC, or Maxim Group, to serve as placement agent. In consideration for its services, the Company paid Maxim Group a placement fee of \$1,035,000. In addition, the Company issued to Maxim Partners LLC, or Maxim Partners, an affiliate of Maxim Group, 7,500 shares of common stock and five-year warrants to purchase an additional 283,750 shares of common stock at an initial exercise price of \$2.64 per share. The warrants issued to Maxim Partners are in substantially the same form as the Warrants issued to the investors, except that they do not include certain anti-dilution provisions contained in the Warrants. However, the placement warrants do contain a provision that could require the Company to repurchase the warrants from the holder under certain conditions. These placement warrants were valued at \$542,530 (see Note 9).

Below is a table that summarizes all outstanding warrants to purchase shares of the Company's common stock as of December 31, 2012.

			Weighted			
Grant Date	Warrants	Exercise	Average	Expiration	Exercised	Warrants
Grant Date	Issued	Price	Exercise	Date	Exercised	Outstanding
			Price			
01/02/2008	37,382	\$ 19.36	\$ 19.36	01/02/2013	-	37,382
06/02/2008	24,523	\$ 19.36	\$ 19.36	06/02/2013	-	24,523
09/03/2010	152,740	\$4.24	\$ 4.24	03/03/2013	-	152,740
09/03/2010	801,885	\$4.52	\$ 4.52	09/03/2015	-	801,885
09/03/2010	132,116	\$8.80	\$ 8.80	09/03/2015	-	132,116
11/26/2012	5,293,750	\$ 2.40	\$ 2.40	05/26/2014	-	5,293,750
12/18/2012	896,750	\$ 2.40	\$ 2.40	06/18/2014	-	896,750
11/26/2012	5,293,750	\$ 4.00	\$ 4.00	11/26/2017	-	5,293,750
11/26/2012	261,250	\$ 2.64	\$ 2.64	11/26/2017	-	261,250
12/18/2012	896,750	\$ 4.00	\$ 4.00	12/18/2017	-	896,750
12/18/2012	22,500	\$ 2.64	\$ 2.64	12/18/2017	-	22,500
	13,813,396		\$ 3.40		-	13,813,396

11. STOCK OPTION PLAN

The Company's 2005 Stock Option Plan (the "Plan") was originally adopted by the Board of Directors of Old Arno in August 2005, and was assumed by the Company on June 3, 2008 in connection with the Merger. After giving effect to the Merger, there were initially 373,831 shares of the Company's common stock reserved for issuance under the 2005 Plan. On April 25, 2011, the Company's Board of Directors approved an amendment to the 2005 Plan to increase the number of shares of common stock issuable thereunder to 875,000 shares. Under the Plan, incentives may be granted to officers, employees, directors, consultants, and advisors. Incentives under the Plan may be granted in any one or a combination of the following forms: (a) incentive stock options and non-statutory stock options, (b) stock appreciation rights, (c) stock awards, (d) restricted stock and (e) performance shares.

The Plan is administered by the Board of Directors, or a committee appointed by the Board, which determines recipients and types of awards to be granted, including the number of shares subject to the awards, the exercise price and the vesting schedule. The term of stock options granted under the Plan cannot exceed 10 years. Options shall not have an exercise price less than the fair market value of the Company's common stock on the grant date, and generally vest over a period of three to four years.

As of December 31, 2012, an aggregate of 112,661 shares remained available for future grants and awards under the Plan, which covers stock options, warrants and restricted awards. The Company issues unissued shares to satisfy stock options, warrants exercises and restricted stock awards.

No options were granted by the Company during the year ended December 31, 2012. For the year ended December 31, 2011, the Company estimated the fair value of each option award granted using the Black-Scholes option-pricing model. The following assumptions were used for the year ended December 31, 2011:

	2011	
Expected Volatility	87	%
Expected Term	5-10 years	
Dividend yield	0.0	%
Risk-free interest rate	1.5-2.0%	
Stock price	\$5.52 - \$5.76	
Forfeiture rate	0.0	%

The valuation assumptions were determined as follows:

Expected volatility – The expected volatility on the average expected volatilities of a sampling of five companies with similar attributes to the Company, including industry, stage of life cycle, size and financial leverage.

Expected term – The expected term of the awards represents the period of time that the awards are expected to be outstanding. Management considered historical data and expectations for the future to estimate employee exercise and post vest termination behavior. Consultant options are assigned an expected term equal to the maximum term of the option grant.

Dividend yield – The estimate for annual dividends is zero, because the Company has not historically paid dividends and does not intend to in the foreseeable future.

A summary of the status of the options issued under the Plan as of December 31, 2012, and information with respect to the changes in options outstanding is as follows:

	Shares Available for	Options Ou Outstandin Stock	Aggregate Intrinsic	
	Grant	Options	Exercise Price	Value
Balance at January 1, 2011	134,669	236,662	\$ 10.88	
Shares authorized for issuance	501,168	-	-	
Options granted under the Plan	(631,789)	631,789	\$ 8.24	
Restricted stock granted under the Plan	(31,250)	-	-	
Options exercised	-	(6,230)	\$ 1.04	
Options forfeited	33,652	(33,652)	\$ 12.24	
Balance at December 31, 2011	6,450	828,569	\$ 10.48	
Options forfeited	106,211	(106,211)	\$ 8.00	
Balance at December 31, 2012	112,661	722,358	\$ 8.88	\$ -
Exercisable at December 31, 2012		445,833	\$ 9.36	\$ -

The following table summarizes information about stock options outstanding at December 31, 2012:

Outstanding					Exercisable			
		Weighted-						
Exercise	Shares	Average	W	eighted-		W	Weighted-	
Price		Remaining	A١	erage Exercise	Shares	Average Exercise		
FIICE		Contractual Life	Life Price			Price		
		(Years)						
\$ 8.00	673,516	7.8	\$	8.00	396,992	\$	8.00	
\$ 19.36	37,383	3.6	\$	19.36	37,383	\$	19.36	
\$ 24.00	11,458	1.2	\$	24.00	11,458	\$	24.00	
Total	722,357	7.6	\$		445,833	\$	9.36	

Stock-based compensation costs for the years ended December 31, 2012 and 2011 and for the cumulative period from August 1, 2005 (inception) through December 31, 2012, are as follows:

	Year Ended I	December 31,		
	2012 2011		Period from August 1, 2005 (inception) through December 31, 2012	
General and administrative	\$ 441,983	\$ 449,652	\$	1,986,610
Research and development	280,828	372,800		1,684,605
Total	\$ 722,811	\$ 822,452	\$	3,671,215

The fair value of options vested under the 2005 Plan was approximately \$863,892 and \$443,507 for the years ended December 31, 2012 and 2011, respectively, and approximately \$3,218,757 for the period from August 1, 2005 (inception) through December 31, 2012.

At December 31, 2012, total unrecognized estimated compensation cost related to stock options granted prior to that date was approximately \$1.1 million which is expected to be recognized over a weighted-average vesting period of 1.5 years. This unrecognized estimated employee compensation cost does not include any estimate for forfeitures of performance-based stock options.

Common stock, stock options or other equity instruments issued to non-employees (including consultants and all members of the Company's Scientific Advisory Board) as consideration for goods or services received by the Company are accounted for based on the fair value of the equity instruments issued (unless the fair value of the consideration received can be more reliably measured). The fair value of stock options is determined using the Black-Scholes option-pricing model and is expensed as underlying options vest. The fair value of any options issued to non-employees is recorded as expense over the applicable service periods.

For the year ended December 31, 2012, the Company did not issue any options. For the year ended December 31, 2011, the Company issued options to purchase a total of 631,789 shares of common stock to employees and consultants with exercise prices ranging from \$8.00 to \$19.36 and terms of up to 10 years. Of this total, 10-year options to purchase 294,297 shares at an exercise price of \$8.00 were issued to the Company's new President and Chief Executive Officer and 10-year options to purchase 218,750 shares at an exercise price of \$8.00 were issued to the Company's new Chief Medical Officer.

12. RELATED PARTIES

On June 1, 2009, the Company entered into a services agreement with Two River Consulting, LLC ("TRC") to provide various clinical development, operational, managerial, accounting and financial, and administrative services to the Company for a period of one year. David M. Tanen, the Company's then President, Secretary and director, Arie S. Belldegrun, the Chairman of the Board of Directors, and Joshua A. Kazam, a director until September 2010, are each partners of TRC. The terms of the Services Agreement were reviewed and approved by a special committee of the Company's Board of Directors consisting of independent directors. None of the members of the special committee has any interest in TRC or the services agreement. As compensation for the services contemplated by the services agreement, the Company pays TRC a monthly cash fee of \$55,000. The services agreement with TRC expired on April 1, 2011 and until a new agreement is in place, TRC is billing the Company for actual hours worked on a monthly basis. For the year ended December 31, 2012, TRC billed Arno \$273,171 for services rendered, an average of approximately \$22,764 per month.

On occasion, some of the Company's expenses are paid by TRC. No interest is charged by TRC on any outstanding balance owed by the Company. For the years ended December 31, 2012 and 2011 and for the period from August 1, 2005 (inception) through December 31, 2012, total cash services and reimbursed expenses totaled \$327,452, \$655,923 and \$2,131,217, respectively. As of December 31, 2012 the Company had a payable to TRC of \$28,268, which was paid in full during the first two months of 2013.

The financial condition and results of operations of the Company, as reported, are not necessarily indicative of results that would have been reported had the Company operated completely independently.

13. PENSION PLAN

On October 1, 2007, the Company adopted a 401(k) savings plan (the "401(k) Plan") for the benefit of its employees. Under the 401(k) Plan, the Company was required to make contributions equal to 3% of eligible compensation for each eligible employee whether or not the employee contributes to the 401(k) Plan. During 2011, the Company terminated the 401(k) Plan. For the years ended December 31, 2012 and 2011 and for the cumulative period from August 1, 2005 (inception) through December 31, 2012, the Company has recorded \$0, \$0 and \$16,064 of matching contributions to the 401(k) Plan.

14. INCOME TAXES

The Company accounts for income taxes using the liability method, which requires the determination of deferred tax assets and liabilities, based on the differences between the financial statement and tax bases of assets and liabilities, using enacted tax rates in effect for the year in which differences are expected to reverse. The net deferred tax asset is adjusted by a valuation allowance, if, based on the weight of available evidence, it is more likely than not that some portion or all of the net deferred tax asset will not be realized. The income tax returns of the Company are subject to examination by federal and state taxing authorities. Such examination could result in adjustments to net income or loss, which changes could affect the income tax liabilities of the Company. The Company's tax returns are open for inspection for all tax years from 2008 to present.

The Company's policy is to include interest and penalties related to unrecognized tax benefits within the Company's provision for (benefit from) income taxes. The Company recognized no amounts for interest and penalties related to unrecognized tax benefits in 2012, 2011 and the period from August 1, 2005 (inception) through December 31, 2012 and as of December 31, 2012 and 2011, had no amounts accrued for interest and penalties.

At December 31, 2012, the Company had no Federal income tax expense or benefit but did have Federal tax net operating loss carry-forwards of approximately \$26.2 million. The federal net operating loss carry-forwards will begin to expire in 2026, unless previously utilized.

Deferred income taxes reflect the net effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's net deferred tax assets at December 31, 2012 and 2011 are shown below.

	For Years Ended December 31,		
	2012	2011	
Non-current deferred tax assets			
Research tax credit	\$2,005,000	\$1,631,000	
Net operating loss carry forwards	15,700,000	11,720,000	
Stock based compensation	446,000	848,000	
Total deferred tax assets	18,151,000	14,199,000	
Non-current deferred tax liability			
Depreciation and amortization	(10,000) (10,000)
Total net deferred tax assets	18,141,000	14,189,000	
Valuation allowance	(18,141,000) (14,189,000))
Net deferred tax assets	\$ -	\$ -	

The Company records a valuation allowance for temporary differences for which it is more likely than not that the Company will not receive future tax benefits. At December 31, 2012 and 2011 the Company recorded valuation allowances of \$18.6 million and \$14.2 million, respectively, representing a change in the valuation allowance of \$4.4 million for the previous fiscal year-ends, due to the uncertainty regarding the realization of such deferred tax assets, to offset the benefits of net operating losses generated during those years.

A reconciliation of the statutory tax rates and the effective tax rates for the years ended December 31, 2012 and 2011 are as follows:

	2012		2011	
	Amount	Rate	Amount	Rate
Federal tax	\$(3,388,000)	34.0 %	\$(2,689,000)	34.0 %
State tax	(592,000)	5.9 %	(390,000)	5.9 %
R&D Credit	(373,000)	2.7 %	(339,000)	4.37 %
Incentive stock options	(30,000)	4.7 %	(48,000)	7.8 %
Valuation allowance	4,383,000	(47.3)%	3,466,000	(52.1)%
Net	\$-	-	\$-	-

There was no income tax benefit recorded for the years ended December 31, 2012 and 2011.

15. COMMITMENTS AND CONTINGENCIES

On March 31, 2011, the Company exercised its early termination option on the Parsippany, NJ office lease, submitting written notice to the landlord and making a payment of \$53,641. The Company continued to make monthly lease payments under the Parsippany lease through December 31, 2011, at which time, this lease terminated.

On August 4, 2011, the Company entered into a lease for new office space of approximately 4,168 square feet in Flemington, New Jersey (the "Flemington Lease"). The lease commencement date was November 17, 2011, with lease payments beginning in February 2012. The lease expiration date is three years from the rent commencement date. The Company provided a cash security deposit of \$10,455, or two months' base rent. The Company is also responsible for payment of its share of common area maintenance costs and taxes. The aggregate remaining minimum future payments under the Flemington Lease at December 31, 2012 are approximately \$150,531 including common area maintenance charges and taxes. The Flemington Lease contains a three-month free rent period and annual escalations, as such, the Company accounts for rent expense on a straight-line basis. The Company recognized \$85,362 and \$7,351 in rent expense for the Flemington Lease for the years ended December 31, 2012 and 2011, respectively.

Future minimum lease payments under operating leases as of December 31, 2012 are as follows:

2013	\$69,981
2014	71,816
2015	8,734

Total future minimum lease payments \$150,531

On April 21, 2011, the Company entered into an employment agreement with Glenn Mattes, as its Chief Executive Officer, with an effective commencement date of employment beginning on April 25, 2011. The agreement provides for a term of three years, expiring on April 25, 2014, and initial base salary of \$100,000. On and after the first anniversary date of the effective commencement date, Mr. Mattes' base salary shall be increased to \$350,000. In addition, Mr. Mattes is eligible to receive an annual target performance bonus of up to 50% of his base salary, but up to \$175,000 during the first year of employment. Additionally, the Company shall issue to Mr. Mattes, 31,250 shares of restricted common stock. These shares vest in 12 equal monthly installments and have a total fair value of \$172,750, or \$5.53 per share, as estimated by management using a Monte Carlo simulation model using the significant assumptions described below in addition to a discount for the restrictions and, in doing so, utilizing a third-party valuation report. The shares are recognized as compensation expense upon vesting. The Company has recognized \$57,584, \$115,168 and \$172,572 of compensation expense for the years ended December 31, 2012, 2011 and the period from inception to December 31, 2012, respectively, in connection with the restricted shares.

In addition, Mr. Mattes was granted 10-year options to purchase a total of 294,297 shares of the Company's common stock at an exercise price equal to \$8.00 per share. Options relating to 60% of such shares are designated as "Employment Options" and options relating to the remaining 40% of the shares are designated as "Performance Options." The right to purchase 25% of the shares subject to the Employment Options vested on April 25, 2012, and thereafter the remaining shares subject to the Employment Options will vest and become exercisable in 24 equal monthly installments. The right to purchase the shares subject to the Performance Options shall vest and become exercisable, if at all, in three equal annual installments during the Term, subject to the successful achievement of specific performance objectives to be established by the Board. The Employment Options, Performance Options, and Restricted Shares were awarded to Mr. Mattes pursuant to the Plan. The employment agreement also entitles Mr. Mattes to certain change of control and severance benefits.

On June 22, 2011, the Company entered into an employment agreement with Alexander Zukiwski, M.D., as its Chief Medical Officer, with an effective commencement date of employment beginning on June 22, 2011. The agreement provides for a term of three years, expiring on June 22, 2014, and initial base salary of \$375,000. The Employment Agreement further provides that, subject to the successful achievement of specific performance objectives to be established by the Board, Dr. Zukiwski will be eligible to receive an annual performance bonus of up to 50% of his annualized base salary. The Company has also agreed to reimburse Dr. Zukiwski in an amount up to \$200,000 for expenses incurred in connection with the relocation of Dr. Zukiwski's primary residence to the northern New Jersey area. As of March 29, 2013, Dr. Zukiwski has not relocated to the northern New Jersey area and the Company has not reimbursed him for any moving expenses.

In addition, Dr. Zukiwski was granted 10-year options to purchase a total of 218,750 shares of the Company's common stock at an exercise price equal to \$8.00 per share. Options relating to 50% of such shares are designated as "Employment Options" and options relating to the remaining 50% of the shares are designated as "Performance Options." The right to purchase 25% of the shares subject to the Employment Options will vested on June 22, 2012, and thereafter the remaining shares subject to the Employment Options will vest and become exercisable in 24 equal monthly installments. The right to purchase the shares subject to the Performance Options shall vest and become exercisable, if at all, in three equal annual installments during the Term, subject to the successful achievement of specific performance objectives to be established by the Board. The employment agreement also entitles Dr. Zukiwski to certain change of control and severance benefits.

The Company has entered into various contracts with third parties in connection with the development of the licensed technology described in Note 6.

The aggregate minimum commitment under these contracts as of December 31, 2012 is approximately \$4.5 million, all expected to be due during 2013 and 2014.

In the normal course of business, the Company enters into contracts that contain a variety of indemnifications with its employees, licensors, suppliers and service providers. Further, the Company indemnifies its directors and officers who are, or were, serving at the Company's request in such capacities. The Company's maximum exposure under these arrangements is unknown as of December 31, 2012. The Company does not anticipate recognizing any significant losses relating to these arrangements.

16. SUBSEQUENT EVENTS

In January 2012, the Company received a notice from the University of Pittsburgh, or Pitt, claiming that the Company was in default under its license agreement relating to AR-67 for failure to pay a \$250,000 annual license fee under the terms of that agreement and providing the Company with 60 days' notice to remedy the default. On March 29, 2012, following the Company's determination not to proceed with further development of AR-67, the Company agreed with Pitt to terminate the license agreement. In February 2013, Pitt commenced an action in the Court of Common Pleas of Allegheny County, Pennsylvania, seeking damages of \$250,000, plus interest and costs, based on its claim that the Company breached the license agreement by failing to pay the annual license fee. On March 28, 2013, the Company entered into a settlement agreement with Pitt pursuant to which the Company agreed to pay \$235,000 in full satisfaction of all remaining obligations under the license agreement.

On January 30, 2013, the Company's Board of Directors appointed Randy Thurman as a director of the Company. Mr. Thurman, age 63, is an Operating Executive at AEA Investments LP, a private equity firm. As consideration for his service on the Board, Mr. Thurman will receive an annual cash stipend of \$50,000, payable quarterly in arrears. In addition, Mr. Thurman was granted a 10-year option under the 2005 Plan to purchase 25,000 shares of the Company's common stock at an exercise price of \$2.40 per share. The right to purchase one-third of the shares subject to the option vested immediately and the remaining shares subject to the option will vest and become exercisable in two equal annual installments on the first and second anniversaries of Mr. Thurman's appointment. Mr. Thurman will also receive additional option grants on an annual basis, consistent with the Board's compensation plan for non-employee directors.

On March 25, 2013, the Company and holders of approximately 80% of the Debentures sold pursuant to the 2012 Purchase Agreement entered into an amendment to the Registration Rights Agreement (see Note 8), permitting the Company, in its sole discretion, to elect to pay liquidated damages resulting from the Company's failure to successfully cause the registration statement covering the resale of 100% of the Registrable Securities to be declared effective by the SEC by March 26, 2013, by issuing shares of common stock in lieu of cash. If electing to issue shares in lieu of paying cash, the Company shall issue to each investor a number of shares of common stock equal to (a) the aggregate amount of liquidated damages that the Company is electing to pay to such investor in the form of shares, divided by (b) \$2.40. Pursuant to the terms of the Registration Rights Agreement, because holders of over two-thirds of the Debentures consented in writing to the March 25, 2013 amendment, such amendment is binding on all holders of Registrable Securities. On March 27, 2013, in accordance with the amendment to the Registration Rights Agreement, the Company issued an aggregate of 123,809 shares of common stock to the investors in lieu of an aggregate cash payment of \$297,144, representing the first monthly installment of liquidated damages under the Registration Rights

Agreement, as amended.

In late March 2013, the Company sought the agreement of the Debenture holders to amend their respective Debentures to provide for the accrual of all interest payments under such Debentures until the applicable maturity date in November or December of 2015, with such interest accruing at the rate of 8% per annum, compounding quarterly. As of March 28, 2013, the Company had entered into such amendments with the holders of Debentures in the aggregate principal amount of \$7,875,000.

Reverse Split of Common Stock

The Company amended its Amended & Restated Certificate of Incorporation, effective as of October 29, 2013, to effect a combination of its common stock at a ratio of 1-for-8 (the "Reverse Split"). The Reverse Split was authorized by the stockholders of the Company on November 10, 2010. As a result of the Reverse Split, all references to the Company's common stock, stock options and warrants and other securities convertible into common stock, and per share amounts for all prior periods presented have been retroactively restated to reflect the 1-for-8 reverse split of the common stock.

ARNO THERAPUTICS, INC. (A DEVELOPMENT STAGE COMPANY) CONDENSED BALANCE SHEETS

	September 30, 2013 (unaudited)	December 31, 2012
ASSETS		
Current assets	A 4 7 40 6 7 2	* 10 0 10 10 *
Cash and cash equivalents	\$ 1,540,673	\$ 10,943,437
Prepaid expenses and other current assets	67,681	203,516
Total current assets	1,608,354	11,146,953
Property and equipment, net	14,816	24,837
Deferred financing fees	1,292,143	1,709,530
Security deposit	10,455	10,455
, ,		
Total assets	\$ 2,925,768	\$ 12,891,775
LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities		
Accounts payable	\$ 2,502,288	\$ 1,553,154
Accrued expenses and other current liabilities	842,221	1,652,159
Due to related party	28,685	28,268
Deferred rent	9,212	12,711
Total current liabilities	3,382,406	3,246,292
	4.702.004	404.020
Convertible debentures, net	4,702,994	491,039
Accrued interest	733,800	-
Derivative liabilities	20,436,401	21,420,276
Total liabilities	29,255,601	25,157,607
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' (DEFICIT) EQUITY		
Preferred stock, \$0.0001 par value, 35,000,000 shares authorized,		
none issued and outstanding	-	-
Common stock, \$0.0001 par value, 500,000,000 shares authorized,		
4,932,200 and 4,545,618 shares issued and outstanding	3,921	3,611
Additional paid-in capital	39,485,083	37,631,339
Deficit accumulated during the development stage	(65,818,837)	(49,900,782)
	•	
Total stockholders' (deficit) equity	(26,329,833)	(12,265,832)

Total liabilities and stockholders' (deficit) equity

\$ 2,925,768

\$ 12,891,775

See accompanying notes to the unaudited condensed financial statements.

ARNO THERAPUTICS, INC.
(A DEVELOPMENT STAGE COMPANY)
CONDENSED STATEMENTS OF OPERATIONS (unaudited)

	Three months	Period from: 30 gust 1, 2005 (inception) to			
	2013	2012	2013	2012	September 30, 2013
Operating expenses: Research and development General and administrative	\$3,168,607 617,826	\$2,067,857 531,431	\$8,903,394 2,137,673	\$6,286,542 1,685,613	\$ 45,748,602 11,480,285
Total operating expenses	3,786,433	2,599,288	11,041,067	7,972,155	57,228,887
Loss from operations	(3,786,433)	(2,599,288)	(11,041,067)	(7,972,155)	(57,228,887)
Other (expense) income:					
Interest income	1,362	658	8,353	5,898	422,473
Interest expense	(1,858,539)	-	(5,876,148)	-	(13,497,276)
Other (expense) income	1,964,273	(416,010)	990,807	2,107,679	4,484,853
Total other (expense) income	107,096	(415,352)	(4,876,988)	2,113,577	(8,589,950)
Net loss	\$ (3,679,337)	\$(3,014,640)	\$(15,918,055)	\$(5,858,578)	\$ (65,818,837)
Net loss per share - basic and diluted	\$(0.75)	\$(0.66)	\$ (3.34)	\$(1.29)	
Weighted-average shares outstanding -basic and diluted	4,932,064	4,541,868	4,767,851	4,539,432	

See accompanying notes to the unaudited condensed financial statements.

ARNO THERAPEUTICS, INC.
(A DEVELOPMENT STAGE COMPANY)
CONDENSED STATEMENT OF STOCKHOLDERS' (DEFICIT) EQUITY
PERIOD FROM AUGUST 1, 2005 (INCEPTION) TO SEPTEMBER 30, 2013
(unaudited)

DEFICIT ACCUMULATED ADDITIONAL DURING THE TOTAL PREFERRED STOCK COMMON STOCK PAID-IN DEVELOPMENT STOCKHOLDERS' **SHARES** AMOUNTSHARES AMOUNTCAPITAL STAGE **EQUITY (DEFICIT)** Issuance of common shares to founders \$ -1,246,100 \$ 997 \$-\$5,000 \$4,003 at \$0.0001 per share Stock based compensation for 9,700 9,700 services Net loss, period from August 1, 2005 (370,893)(370,893)(inception) through December 31, 2006 Balance at 1,246,100 997 13,703 December 31, (370,893)(356,193)2006 Stock based compensation for 88,300 88,300 services Net loss, year ended December (3,359,697)(3,359,697)31, 2007 Balance at 997 December 31, 1,246,100 102,003 (3,730,590)(3,627,590)2007 Common stock sold in private placement, net of issuance 920,086 736 17,689,301 17,690,037 costs of \$141,646

Conversion of notes payable upon closing of private placement	-	-	245,292	196	4,278,322	-	4,278,518
Note discount arising from note conversion	-	-	-	-	475,391	-	475,391
Warrants issued in connection with note conversion	-	-	-	-	348,000	-	348,000
Reverse merger transaction -							
elimination of accumulated deficit	-	-	-	-	(120,648)	-	(120,648)
previously issued Laurier common stock	-	-	137,525	110	120,538	-	120,648
Warrants issued for services	-	-	-	-	480,400	-	480,400
Stock based compensation for services	-	-	-	-	1,131,218	-	1,131,218
Net loss, year ended December 31, 2008						(12,913,566)	(12,913,566)
Balance at December 31, 2008	-	-	2,549,003	2,039	24,504,525	(16,644,156)	7,862,408
Stock based compensation for services	-	-	-	-	647,448	-	647,448
Stock option exercise	-	-	2,500	2	2,598	-	2,600
Net loss, year ended December 31, 2009						(6,936,705)	(6,936,705)

Balance at December 31, 2009	-	-	2,551,503	2,041	25,154,571	(23,580,861)	1,575,751
Stock based compensation for services	-	-	-	-	249,286	-	249,286
Convertible preferred units issued in private placement, net of issuance costs of \$1,299,770	1,909,250	1,527	-	-	13,507,983	_	13,509,510
Warrants issued in connection with convertible preferred units issued in private placement	-	-	-	-	(3,340,421)	-	(3,340,421)
Warrants issues to placement agents in connection with private placement	-	-	-	-	464,720	-	464,720
Net loss, year ended December 31, 2010	-	-	-	-	-	(4,023,026)	(4,023,026)
Balance at December 31, 2010	1,909,250	1,527	2,551,503	2,041	36,036,139	(27,603,887)	8,435,820
Stock based compensation for services	-	-	-	-	707,284	-	707,284
Preferred stock conversion	(1,909,250)	(1,527)	1,909,250	1,527	-	-	-
Issuance of stock dividend in connection with conversion of preferred stock	-	-	39,884	32	(32)	-	-
	-	-	31,250	-	115,168	-	115,168

Grant of restricted shares							
Stock option exercise	-	-	6,231	5	6,475	-	6,480
Net loss, year ended December 31, 2011	-	-	-	-	-	(7,909,113)	(7,909,113)
Balance at December 31, 2011	-	-	4,538,118	3,605	36,865,034	(35,513,000)	1,355,639
Stock based compensation for services	-	-	-	-	722,811	-	722,811
Issuance of common shares pursuant to							
placement agent agreement	-	-	7,500	6	43,494	-	43,500
Net loss, year ended December 31, 2012	-	-	-	-	-	(14,387,782)	(14,387,782)
Balance at December 31, 2012	-	-	4,545,618	3,611	37,631,339	(49,900,782)	(12,265,832)
Stock based compensation for services	-	-	-	-	926,250	-	926,250
Issuance of common shares in lieu of							
liquidated damages	-	-	380,627	305	913,205	-	913,510
Issuance of common shares upon debenture conversion	-	-	5,956	5	14,289	-	14,294
Net loss, nine months ended September 30, 2013	-	-	-	-	-	(15,918,055)	(15,918,055)

Balance at

September 30, - \$- 4,932,200 \$ 3,921 \$ 39,485,083 \$ (65,818,837) \$ (26,329,833)

2013

See accompanying notes to the unaudited condensed financial statements.

ARNO THERAPEUTICS, INC. (A DEVELOPMENT STAGE COMPANY) CONDENSED STATEMENTS OF CASH FLOWS (unaudited)

	Nine months ended September 30,		Period from August 1, 2005 (inception) to	
	2013	2012	September 30, 2013	
Cash flows from operating activities				
Net loss	\$ (15,918,055)	\$ (5,858,578)	\$ (65,818,837)	
Adjustment to reconcile net loss to net cash used				
in operating activities				
Depreciation and amortization	10,021	10,412	125,001	
Stock-based compensation	926,250	543,154	4,597,465	
Change in fair value of derivative liability	(983,875)	(2,105,979)	(3,425,574)	
Write-off of intangible assets	-	-	85,125	
Warrants issued for services	-	-	480,400	
Warrants issued in connection with note conversion	-	-	348,000	
Note discount arising from beneficial conversion feature	-	-	475,391	
Deferred rent	(3,499)	6,251	9,212	
Loss on disposal of assets	-	-	5,357	
Noncash interest expense	6,303,700	-	12,871,214	
Changes in operating assets and liabilities				
Prepaid expenses and other current assets	135,835	(5,945)	(67,681)	
Security deposit	-	-	(10,455)	
Accounts payable	949,134	1,496,276	2,502,288	
Accrued expenses	(800,486)	(110,205)	257,385	
Due to related party	417	(60,098)	28,685	
Net cash used in operating activities	(9,380,558)	(6,084,712)	(47,537,024)	
Cash flows from investing activities				
Purchase of property and equipment	-	-	(100,174)	
Cash paid for intangible assets	-	-	(85,125)	
Proceeds from related party advance	-	-	525,000	
Repayment of related party advance	-	-	(525,000)	
Net cash used in investing activities	-	-	(185,299)	
Cash flows from financing activities				
Proceeds from issuance of common stock to founders	-	-	5,000	
Proceeds from issuance of preferred stock in private placement, net	-	-	13,974,230	
Proceeds from issuance of common stock in			17 600 027	
private placement, net	-	-	17,690,037	
Deferred financing fees paid	(22,206)	-	(1,239,551)	
Proceeds from issuance of notes payable	-	-	1,000,000	
Repayment of notes payable	-	-	(1,000,000)	

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Proceeds from issuance of convertible notes payable Proceeds from issuance of convertible debentures payable Proceeds from exercise of stock options Net cash provided by financing activities	- - (22,206)	- - -	3,967,000 14,857,200 9,080 49,262,996
Net increase (decrease) in cash and cash equivalents Cash and cash equivalents at beginning of period	(9,402,764) 10,943,437	(6,084,712) 6,678,344	1,540,673
Cash and cash equivalents at end of period	\$ 1,540,673	\$ 593,632	\$ 1,540,673
Supplemental schedule of cash flows information:			
Cash paid for interest	\$ 157,284	\$ -	\$ 342,318
Supplemental schedule of non-cash investing and financing activities:			
Conversion of debentures into common stock Conversion of notes payable and interest to common stock Common shares of Laurier issued in reverse merger	\$ 14,293 \$ - \$ -	\$ - \$ - \$ -	\$ 14,293 \$ 4,278,518 \$ 110
transaction Issuance of common shares in lieu of liquidated damages	\$ 913,510	\$ -	\$ 913,510
Issuance of warrants in connection with private placement of convertible preferred units	\$ -	\$ -	\$ 3,340,421
Issuance of warrants in connection with private placement of convertible debentures	\$ -	\$ -	\$ 12,973,055
Issuance of common stock pursuant to placement agent agreement	\$ -	\$ 28,500	\$ 43,500
Preferred stock dividends settled in common stock	\$ -	\$ -	\$ 319,074

See accompanying notes to the unaudited condensed financial statements.

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONDENSED FINANCIAL STATEMENTS

September 30, 2013 (unaudited)

1. DESCRIPTION OF BUSINESS

Arno Therapeutics, Inc. ("Arno" or the "Company") develops innovative drug candidates intended to treat patients with cancer. The following is a summary of the Company's product development pipeline:

Onapristone Onapristone is an anti-progestin hormone blocker that has been shown to have anti-tumor activity in patients with breast cancer. In prior clinical studies, onapristone has demonstrated a 56% objective response rate as a first line "hormone" treatment of breast cancer. In connection with the development of onapristone, the Company has engaged Leica Biosystems and Clarient Diagnostic Services, Inc. to perform a feasibility study leading to the development of a immunohistochemistry based diagnostic test to selectively identify patients who express the activated form of the progesterone receptor and therefore may be more likely to benefit from treatment with onapristone and to perform the interpretation/analysis of tumor samples with the developed diagnostic test.. The Company completed initial pre-clinical toxicology studies enabling the submission of an Investigational Medicinal Product Dossier ("IMPD"), the foreign equivalent of an investigational new drug application ("IND") in the second quarter of 2013 to support a pharmacokinetic/food effect study. The IMPD was accepted on July 31, 2013. The study subject accrual and analysis of the pharmacokinetic/food effect study has been completed. The company submitted an IMPD to support the conduct of a phase I study in patients with progesterone receptor expressing cancers during the third quarter of 2013. The Company has completed manufacturing activities of onapristone Phase I study supplies and plans on initiating a Phase I study in patients with progesterone receptor positive carcinomas during the fourth quarter of 2013. The Company is also investigating onapristone as a potential treatment for patients with prostate cancer and has begun pre-clinical toxicology studies to enable the submission of an IMPD or IND during the fourth quarter of 2013 with the intent of conducting a Phase I clinical study in adult male subjects with castrate resistant prostate cancer during the first quarter of 2014.

AR-42 is an orally available, broad spectrum inhibitor of both histone and non-histone deacetylation proteins, or Pan-DAC, which play an important role in the regulation of gene expression, cell growth and survival. AR-42 is currently being studied in an investigator-initiated Phase I/II clinical study in adult subjects with relapsed or refractory multiple myeloma, chronic lymphocytic leukemia, or CLL, or lymphoma. The protocol has been amended to include a solid tumor dose escalation cohort which is currently closed to accrual and is being amended to include additional patients with solid tumors at the recommended phase 2 dose. The Company is also supporting an investigator initiated Phase I study of AR-42 in combination with decitabine in patients with hematological malignancies that has been initiated during the third quarter of 2013.

AR-12 AR-12 is an orally available, targeted anti-cancer agent that has been shown in pre-clinical studies to inhibit phosphoinositide dependent protein kinase-1, or PDK-1, a protein in the PI3K/Akt pathway that is involved in the growth and proliferation of cells, including cancer cells. AR-12 has also been reported to cause cell death through the induction of endoplasmic reticulum stress and work is ongoing to further understand the mechanism of action. The Company has completed a multi-centered Phase I clinical study of AR-12 in adult subjects with advanced or recurrent solid tumors or lymphoma. During the first quarter of 2013, the last study subject completed the planned dose-escalation phase of the study.

The Company was incorporated in Delaware in March 2000, at which time its name was Laurier International, Inc. ("Laurier"). Pursuant to an Agreement and Plan of Merger dated March 6, 2008 (as amended, the "Merger Agreement"),

by and among the Company, Arno Therapeutics, Inc., a Delaware corporation formed on August 1, 2005 ("Old Arno"), and Laurier Acquisition, Inc., a Delaware corporation and wholly-owned subsidiary of the Company ("Laurier Acquisition"), on June 3, 2008, Laurier Acquisition merged with and into Old Arno, with Old Arno remaining as the surviving corporation and a wholly-owned subsidiary of Laurier. Immediately following this merger, Old Arno merged with and into Laurier and Laurier's name was changed to Arno Therapeutics, Inc. These two merger transactions are hereinafter collectively referred to as the "Merger." Immediately following the Merger, the former stockholders of Old Arno collectively held 95% of the outstanding common stock of Laurier, assuming the issuance of all shares issuable upon the exercise of outstanding options and warrants, and all of the officers and directors of Old Arno in office immediately prior to the Merger were appointed as the officers and directors of Laurier immediately following the Merger. Further, Laurier was a non-operating shell company prior to the Merger. The merger of a private operating company into a non-operating public shell corporation with nominal net assets is considered to be a capital transaction in substance, rather than a business combination, for accounting purposes. Accordingly, the Company treated this transaction as a capital transaction without recording goodwill or adjusting any of its other assets or liabilities. All costs incurred in connection with the Merger have been expensed. Upon completion of the Merger, the Company adopted Old Arno's business plan.

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONDENSED FINANCIAL STATEMENTS

September 30, 2013 (unaudited)

2. BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company is a development stage enterprise since it has not yet generated any revenue from the sale of products and, through September 30, 2013, its efforts have been principally devoted to developing its licensed technologies, recruiting personnel, establishing office facilities, and raising capital. Accordingly, the accompanying condensed financial statements have been prepared in accordance with the provisions of Accounting Standards Codification ("ASC") 915, "Development Stage Entities." The Company has experienced net losses since its inception and has an accumulated deficit of approximately \$65.8 million at September 30, 2013. The Company expects to incur substantial and increasing losses and to have negative net cash flows from operating activities as it expands its technology portfolio and engages in further research and development activities, particularly from conducting manufacturing activities, pre-clinical studies and clinical trials.

The accompanying unaudited Condensed Financial Statements have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Form 10-Q adopted under the Securities Exchange Act of 1934, as amended. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America for complete financial statements. In the opinion of Arno's management, the accompanying Condensed Financial Statements contain all adjustments (consisting of normal recurring accruals and adjustments) necessary to present fairly the financial position, results of operations and cash flows of the Company at the dates and for the periods indicated. The interim results for the period ended September 30, 2013 are not necessarily indicative of results for the full 2013 fiscal year or any other future interim periods. Because the Merger was accounted for as a reverse acquisition under generally accepted accounting principles, the financial statements for periods prior to September 3, 2008, reflect only the operations of Old Arno.

These unaudited Condensed Financial Statements have been prepared by management and should be read in conjunction with the financial statements and notes thereto included in the Company's Annual Report on Form 10-K for the year ended December 31, 2012, as filed with the Securities and Exchange Commission.

The preparation of financial statements in conformity with generally accepted accounting principles requires that management 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 revenues and expenses during the reporting periods. Estimates and assumptions principally relate to services performed by third parties but not yet invoiced, estimates of the fair value and forfeiture rates of stock options issued to employees and consultants, and estimates of the probability and potential magnitude of contingent liabilities. Actual results could differ from those estimates.

Research and Development

Research and development costs are charged to expense as incurred. Research and development includes employee costs, fees associated with operational consultants, contract clinical research organizations, contract manufacturing organizations, clinical site fees, contract laboratory research organizations, contract central testing laboratories, licensing activities, and allocated office, insurance, depreciation, and facilities expenses. The Company accrues for costs incurred as the services are being provided by monitoring the status of the trial and the invoices received from its

external service providers. The Company adjusts its accruals when actual costs become known. Costs related to the acquisition of technology rights for which development work is still in process are charged to operations as incurred and considered a component of research and development expense.

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONDENSED FINANCIAL STATEMENTS

September 30, 2013 (unaudited)

2. BASIS OF PRESENTATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Convertible Debentures and Warrant Liability

The Company accounts for the convertible debentures and warrants issued in connection with the 2012 Purchase Agreement (see Note 6) and for the warrants issued in connection with the 2010 Purchase Agreement (see Note 8) in accordance with the guidance on Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity, which provides that the Company classify the warrant instrument as a liability at its fair value and adjusts the instrument to fair value at each reporting period. This liability is subject to re-measurement at each balance sheet date until exercised, and any change in fair value is recognized as a component of other income or expense. The fair value of warrants issued by the Company, in connection with private placements of securities, has been estimated using a Monte Carlo simulation model and, in doing so, the Company's management utilized a third-party valuation report. The Monte Carlo simulation is a generally accepted statistical method used to generate a defined number of stock price paths in order to develop a reasonable estimate of the range of the Company's future expected stock prices and minimizes standard error.

Reverse Stock Split

Effective as of the close of business on October 29, 2013, the Company amended its Amended and Restated Certificate of Incorporation to effect a combination ("Reverse Stock Split") of the Common Stock at a ratio of one-for-eight. All historical share and per share amounts have been adjusted to reflect the Reverse Stock Split.

3. LIQUIDITY AND CAPITAL RESOURCES

Cash resources as of September 30, 2013 were approximately \$1.5 million, compared to approximately \$10.9 million as of December 31, 2012. Based on its resources at September 30, 2013, together with the net proceeds from the Company's issuance and sale of common stock and warrants pursuant to a Securities Purchase Agreement dated October 29, 2013 among the Company and the investors identified therein (the "2013 Purchase Agreement") (see Note 11), and the current plan of expenditure on continuing development of the Company's current product candidates, the Company believes that it has sufficient capital to fund its operations through the fourth quarter of 2014. However, the Company will need substantial additional financing in order to fund its operations beyond such period and thereafter until it can achieve profitability, if ever. The Company's continued operations will depend on its ability to raise additional funds through various potential sources, such as equity and debt financing, or to license its product candidates to another pharmaceutical company. The Company will continue to fund operations from cash on hand and through sources of capital similar to those previously described. The Company cannot assure that it will be able to secure such additional financing, or if available, that it will be sufficient to meet its needs.

The success of the Company depends on its ability to develop new products to the point of regulatory approval and subsequent revenue generation and, accordingly, to raise enough capital to finance these developmental efforts. Management plans to raise additional capital either by selling shares of its stock or other securities, issuing additional indebtedness or by licensing the rights to one or more of its product candidates to finance the continued operating and

capital requirements of the Company. Amounts raised will be used to further develop the Company's product candidates, acquire rights to additional product candidates and for other working capital purposes. While the Company will extend its best efforts to raise additional capital to fund all operations beyond the fourth quarter of 2014, management can provide no assurances that the Company will be successful in raising sufficient funds.

In addition, to the extent that the Company raises additional funds by issuing shares of its common stock or other securities convertible or exchangeable for shares of common stock, stockholders will experience dilution, which may be significant. In the event the Company raises additional capital through debt financings, the Company may incur significant interest expense and become subject to covenants in the related transaction documentation that may affect the manner in which the Company conducts its business. To the extent that the Company raises additional funds through collaboration and licensing arrangements, it may be necessary to relinquish some rights to its technologies or product candidates, or grant licenses on terms that may not be favorable to the Company. Any or all of the foregoing may have a material adverse effect on the Company's business and financial performance.

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONDENSED FINANCIAL STATEMENTS

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4. BASIC AND DILUTED LOSS PER SHARE

Basic loss per share is computed by dividing the loss available to common shareholders by the weighted-average number of common shares outstanding. Diluted loss per share is computed similarly to basic loss per share except that the denominator is increased to include the number of additional common shares that would have been outstanding if the potential common shares had been issued and if the additional common shares were dilutive.

	For the Three Months Ended September 30,				For the Nine Months Ended Septeml			
	2013	2012			2013			
	Loss	Shares	Per Shaltenss	Shares	Per SharLoss	Shares	Per S	
	(Numerator)	(Denominator)	Amoun(Numerator)	(Denominator)	Amount (Numerator)	(Denominator)	Amo	
Net loss	\$(3,679,337)		\$(3,014,640)		\$(15,918,055)			

Basic and Diluted EPS Loss

available to common \$(3,679,337) 4,932,064 \$(.75) \$(3,014,640) 4,541,868 \$(0.66) \$(15,918,055) 4,767,851

stockholders

For all periods presented, potentially dilutive securities are excluded from the computation of fully diluted loss per share as their effect is anti-dilutive.

As of September 30, 2013, potentially dilutive securities include:

September 30, 2013

Warrants to purchase common stock 6,474,250 Options to purchase common stock 738,485 Total potentially dilutive securities 7,212,735

There were no potentially dilutive securities as of September 30, 2012.

For the three months ended September 30, 2013 and 2012, 7,288,812 and 1,871,006 options, warrants and convertible debentures have been excluded from the computation of potentially dilutive securities, respectively, as their exercise prices are greater than the fair market price per common share as of September 30, 2013 and 2012, respectively.

5. INTANGIBLE ASSETS AND INTELLECTUAL PROPERTY

License Agreements

Onapristone License Agreement

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The Company's rights to onapristone are governed by a license agreement with Invivis Pharmaceuticals, Inc. ("Invivis"), dated February 13, 2012. Under this agreement, the Company holds an exclusive, royalty-bearing license for the rights to commercialize onapristone for all therapeutic uses. The license agreement provides the Company with worldwide rights to develop and commercialize onapristone with the exception of France; provided, however, that the Company has an option to acquire French commercial rights from Invivis upon notice to Invivis together with additional consideration.

The onapristone license agreement provides the Company with exclusive, worldwide rights to a United States provisional patent application that relates to assays for predictive biomarkers for anti-progestin efficacy. The Company intends to expand its patent portfolio by filing additional patent applications covering the use of onapristone and/or a companion diagnostic product. If the pending patent application issues, the issued patent would be scheduled to expire in 2031.

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5. INTANGIBLE ASSETS AND INTELLECTUAL PROPERTY (Continued)

The Company made a one-time cash payment of \$500,000 to Invivis upon execution of the license agreement on February 13, 2012. Additionally, Invivis will receive performance-based cash payments of up to an aggregate of \$15.1 million upon successful completion of clinical and regulatory milestones relating to onapristone, which milestones include the marketing approval of onapristone in multiple indications in the United States or the European Union as well as Japan. The first milestone was due upon the dosing of the first patient in a pharmacokinetic study and was achieved during August 2013 and the Company made a \$150,000 payment to Invivis during October 2013. The Company will make its next milestone payment to Invivis upon the dosing of the first subject in the first Company-sponsored Phase I clinical trial of onapristone, which is anticipated in the fourth quarter 2013. In addition, the Company will pay Invivis low single digit sales royalties based on net sales of onapristone by the Company or any of its sublicensees. Pursuant to a separate services agreement which expires in February 2014, Invivis provides the Company with certain clinical development support services, which includes the assignment of up to two full-time employees to perform such services, in exchange for a monthly cash payment of approximately \$70,833, recorded as a component of research and development expense on the statements of operations.

Under the license agreement with Invivis, the Company also agreed to indemnify and hold Invivis and its affiliates harmless from any and all claims arising out of or in connection with the production, manufacture, sale, use, lease, consumption or advertisement of onapristone, provided, however, that the Company shall have no obligation to indemnify Invivis for claims that (a) any patent rights infringe third party intellectual property, (b) arise out of the gross negligence or willful misconduct of Invivis, or (c) result from a breach of any representation, warranty confidentiality obligation of Invivis under the license agreement. The license agreement will terminate upon the later of (i) the last to expire valid claim contained in the patent rights, and (ii) February 13, 2032. In general, Invivis may terminate the license agreement at any time upon a material breach by the Company to the extent the Company fails to cure any such breach within 90 days after receiving notice of such breach or in the event the Company files for bankruptcy. The Company may terminate the agreement for any reason upon 90 days' prior written notice.

AR-12 and AR-42 License Agreements

The Company's rights to both AR-12 and AR-42 are governed by separate license agreements with The Ohio State University Research Foundation ("Ohio State") entered into in January 2008. Pursuant to each of these agreements, Ohio State granted the Company exclusive, worldwide, royalty-bearing licenses to commercialize certain patent applications, know-how and improvements relating to AR-12 and AR-42 for all therapeutic uses.

In 2008, pursuant to the Company's license agreements for AR-12 and AR-42, the Company made one-time cash payments to Ohio State in the aggregate amount of \$450,000 and reimbursed it for past patent expenses. Additionally, the Company is required to make performance-based cash payments upon successful completion of clinical and regulatory milestones relating to AR-12 and AR-42 in the United States, Europe and Japan. The license agreements for AR-12 and AR-42 provide for aggregate potential milestone payments of up to \$6.1 million for AR-12, of which \$5.0 million is due only after marketing approval in the United States, Europe and Japan, and \$5.1 million for AR-42, of which \$4.0 million is due only after marketing approval in the United States, Europe and Japan. In September 2009, the Company paid Ohio State a milestone payment upon the commencement of the first Company-sponsored Phase I clinical study of AR-12. The first milestone payment for AR-42 will be due when the first patient is dosed in

the first Company-sponsored clinical trial, which is not expected to occur in 2013. Pursuant to the license agreements for AR-12 and AR-42, the Company must pay Ohio State royalties on net sales of licensed products at rates in the low-single digits. To the extent the Company enters into a sublicensing agreement relating to either or both of AR-12 or AR-42, the Company will be required to pay Ohio State a portion of all non-royalty income received from such sublicensee. The Company does not expect to be required to make any milestone payments under these license agreements during 2013 or 2014.

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5. INTANGIBLE ASSETS AND INTELLECTUAL PROPERTY (Continued)

The license agreements with Ohio State further provide that the Company will indemnify Ohio State from any and all claims arising out of the death of or injury to any person or persons or out of any damage to property, or resulting from the production, manufacture, sale, use, lease, consumption or advertisement of either AR-12 or AR-42, except to the extent that any such claim arises out of the gross negligence or willful misconduct of Ohio State. The license agreements for AR-12 and AR-42 each expire on the later of (i) the expiration of the last valid claim contained in any licensed patent and (ii) 20 years after the effective date of the license. Ohio State will generally be able to terminate either license upon the Company's breach of the terms of the license to the extent the Company fails to cure any such breach within 90 days after receiving notice of such breach or the Company files for bankruptcy. The Company may terminate either license upon 90 days prior written notice.

AR-67 License Agreement

In January 2012, the Company received a notice from the University of Pittsburgh, ("Pitt") claiming that the Company was in default under its license agreement relating to AR-67 for failure to pay a \$250,000 annual license fee under the terms of that agreement and providing the Company with 60 days' notice to remedy the default. On March 29, 2012, following the Company's determination not to proceed with further development of AR-67, the Company agreed with Pitt to terminate the license agreement. In February 2013, Pitt commenced an action in the Court of Common Pleas of Allegheny County, Pennsylvania, seeking damages of \$250,000, plus interest and costs, based on its claim that the Company breached the license agreement by failing to pay the annual license fee. On March 28, 2013, the Company entered into a settlement agreement with Pitt pursuant to which the Company agreed to pay \$235,000 in full satisfaction of all remaining obligations under the license agreement, which payment was made on April 2, 2013.

6. CONVERTIBLE DEBENTURES

On November 26, 2012, the Company entered into a Securities Purchase Agreement, with a number of institutional and accredited investors (as amended, the "2012 Purchase Agreement") pursuant to which the Company sold in a private placement an aggregate principal amount of \$14,857,200 of three-year 8% Senior Convertible Debentures("the Debentures"). In accordance with the 2012 Purchase Agreement, the Company also issued five-year Series A warrants to purchase an aggregate of 6,190,500 shares of common stock at an initial exercise price of \$4.00 per share (the "Series A Warrants") and 18-month Series B warrants to purchase an aggregate of 6,190,500 shares of common stock at an initial exercise price of \$2.40 per share (the "Series B Warrants" and together with the Series A Warrants, the "2012 Warrants"). The sale of the Debentures and 2012 Warrants, which occurred in two closings on November 26, 2012 and December 18, 2012, resulted in aggregate gross proceeds of approximately \$14.9 million, before deducting placement agent fees and other transaction-related expenses of approximately \$1.2 million. The 2012 Warrants were valued at \$12,430,524 on issuance and recorded as a debt discount (see Note 7).

The conversion price of the Debentures was subject to a "full-ratchet" anti-dilution provision, such that in the event the Company makes an issuance of common stock (subject to customary exceptions) at a price per share less than the applicable exercise price of the Debentures, the applicable conversion price will be reduced to the price per share applicable to such new issuance. However, after such time as the Company has raised at least \$12 million in subsequent equity financings, the conversion price of the Debentures will be subject to a customary weighted-average

price adjustment with respect to new issuances. This conversion feature of the Debentures is considered an embedded derivative and was accounted for separately from the Debentures and was valued at \$7,548,500 on issuance and recorded as a debt discount (see Note 7).

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NOTES TO CONDENSED FINANCIAL STATEMENTS

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6. CONVERTIBLE DEBENTURES (Continued)

The following table reflects the debt discount for the 2012 Warrants and the embedded conversion feature of the Debentures at their fair values on issuance:

	Issuance
Debentures, principal	14,857,200
2012 Warrant liability	(12,430,524)
Debenture conversion feature	(7,548,500)
	(5,121,824)

The excess fair value over proceeds on the date of issuance of approximately \$5.1 million was recorded in interest expense on the statement of operations on the issuance. As of September 30, 2013 and December 31, 2012, the Company recorded amortization on the debt discount of \$4.7 million and \$0.5 million, respectively, to interest expense.

Pursuant to the terms of a Conversion Agreement dated October 29, 2013 (see Note 11), among the Company and the holders of the Debentures, all principal and accrued and unpaid interest owing under the Debentures was converted into shares of the Company's common stock at a price of \$2.40 per share. In addition, in consideration for their agreement to convert the Debentures, the Company agreed to pay to each holder an additional amount representing 12 months accrued interest on the outstanding principal amount of such holder's Debenture, which amount was satisfied by the issuance of shares of common stock at a price of \$2.40 per share. The Company issued an aggregate of approximately 6.2 million shares of common stock in satisfaction of its obligations under the Debentures

Pursuant to the terms of a Registration Rights Agreement entered into on November 26, 2012 in connection with the 2012 Purchase Agreement, the Company agreed to file a registration statement under the Securities Act of 1933, as amended, covering the resale of: (i) 100% of the shares of common stock issuable as payment of accrued interest under the Debentures and upon exercise of the Series A Warrants; and (ii) 150% of the shares of common stock issuable upon conversion of the Debentures and upon exercise of the Series B Warrants (collectively, the "Registrable Securities"). The Company further agreed to cause such registration statement to be filed within 30 days following the date of the Registration Rights Agreement, or by December 26, 2012, and to cause such registration statement to be declared effective within 60 days following the date of the Registration Rights Agreement, or by January 25, 2013, or, if the registration statement was subject to review by the SEC, to cause such registration statement to be declared effective within 120 days following the date of the Registration Rights Agreement, or by March 26, 2013. If such registration statement, covering 100% of the Registrable Securities, was not declared effective by the SEC by the applicable date, the Company agreed to pay liquidated damages to the investors in the amount of 2% of each investor's aggregate investment amount per month until the registration statement is declared effective or until such earlier time as the Registrable Securities may be traded pursuant to Rule 144.

On December 26, 2012, the Company filed a registration statement seeking to register 100% of the Registrable Securities. However, the SEC determined that the number of shares the Company was seeking to register exceeded the limitations imposed by the SEC under Rule 415, and the Company was thus unable to register a significant amount of the Registrable Securities. As a result of the SEC's determination, the Company amended the registration statement to

reduce the number of Registrable Securities covered thereby by including only the shares issuable upon exercise of the Series B Warrants. As amended, the registration statement was declared effective by the SEC on April 18, 2013. Accordingly, because a registration statement covering 100% of the Registrable Securities was not declared effective by March 26, 2013, the investors each became entitled to liquidated damages in the amount of 2% of their investment amount per month, payable on March 27, 2013 and on each monthly anniversary thereafter until the Registrable Securities may be traded pursuant to Rule 144. Because the Registrable Securities could be resold by their holders under Rule 144 six months after the applicable closing date under the 2012 Purchase Agreement, the Company was required to pay the investors approximately three months' of liquidated damages, or approximately \$0.9 million in the aggregate recorded as a component of interest expense on the statements of operations.

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6. CONVERTIBLE DEBENTURES (Continued)

On March 25, 2013, the Company and holders of approximately 80% of the principal amount of Debentures entered into an amendment to the Registration Rights Agreement, permitting the Company, in its sole discretion, to elect to pay liquidated damages resulting from the Company's failure to successfully cause the registration statement covering the resale of 100% of the Registrable Securities to be declared effective by the SEC by March 26, 2013, by issuing shares of common stock in lieu of cash. If electing to issue shares in lieu of paying cash, the Company agreed to issue to each investor a number of shares of common stock equal to (a) the aggregate amount of liquidated damages that the Company is electing to pay to such investor in the form of shares, divided by (b) \$2.40. Pursuant to the terms of the Registration Rights Agreement, because holders of over two-thirds of the Debentures consented in writing to the March 25, 2013 amendment, such amendment is binding on all holders of Registrable Securities. On March 27, 2013, in accordance with the amendment to the Registration Rights Agreement, the Company issued an aggregate of approximately 123,809 shares of common stock to the investors in lieu of an aggregate cash payment of \$297,144, representing the first installment of liquidated damages under the Registration Rights Agreement, as amended. On April 29, 2013, in accordance with the amendment to the Registration Rights Agreement, the Company issued an aggregate of approximately 136,536 shares of common stock to the investors in lieu of an aggregate cash payment of \$327,688, representing the second installment of liquidated damages under the Registration Rights Agreement, as amended.

In May 2013, the Company determined that investors were entitled to additional liquidated damages arising from the issuance of convertible debt in 2012 in the amount of \$288,674. The Company has assessed that this amount should have been accrued in 2012 as part of the debt issuance. The Company determined that the impact of not reflecting this in 2012 is not material to the 2012 financial statements and has reflected this as interest expense in the first quarter of 2013. This expense resulted in the issuance of additional shares to the investors and will thus be a non-cash charge. On May 27, 2013, the Company issued an aggregate of approximately 120,280 shares of common stock to the investors in lieu of an aggregate cash payment of \$288,674, representing the third and final installment of liquidated damages under the Registration Rights Agreement, as amended.

In March 2013, the Company sought the agreement of the Debenture holders to amend their respective Debentures to provide for the accrual of all interest payments under such Debentures until the applicable maturity date in November or December of 2015, with such interest accruing at the rate of 8% per annum, compounding quarterly. As of September 30, 2013, there was an aggregate of \$733,800 of accrued and unpaid interest outstanding under the Debentures.

In connection with the Company's recent financing (See Note 11) all of the accrued interest on the Debentures were converted into approximately 0.3 million shares of common stock on October 29, 2013.

7. FAIR VALUE OF FINANCIAL INSTRUMENTS

The Company defines fair value as the amount at which an asset (or liability) could be bought (or incurred) or sold (or settled) in a current transaction between willing parties, that is, other than in a forced or liquidation sale. The fair value estimates presented in the table below are based on information available to the Company as of September 30, 2013.

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7. FAIR VALUE OF FINANCIAL INSTRUMENTS (Continued)

The accounting standard regarding fair value measurements discusses valuation techniques, such as the market approach (comparable market prices), the income approach (present value of future income or cash flow), and the cost approach (cost to replace the service capacity of an asset or replacement cost). The standard utilizes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The following is a brief description of those three levels:

•Level 1: Observable inputs such as quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly.

- •These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.
- •Level 3: Unobservable inputs that reflect the reporting entity's own assumptions.

The Company has determined the fair value of certain liabilities using the market approach. The following table presents the Company's fair value hierarchy for these assets measured at fair value on a recurring basis as of September 30, 2013:

		Quoted	Market			
		Prices in	n Active	Significa	nt Other	Significant
	Fair Value	Markets		Observab	le Inputs	Unobservable Inputs
	September 30, 2013	(Level 1)	(Level 2)		(Level 3)
Liabilities						
Warrant liability - 2010 Series B	\$ 346,414	\$	-	\$	-	\$ 346,414
Debenture conversion feature -2012	5,403,000		-		-	5,403,000
Warrant liability - 2012 placement agent	374,550		-		-	374,550
Warrant liability - 2012 Series A&B	14,312,437		-		-	14,312,437
Total	\$ 20,436,401	\$	-	\$	-	\$ 20,436,401

The fair value of these derivative liabilities was estimated by management using a third party valuation report. The third-party estimated the value of the warrants using a Monte Carlo simulation model. The Monte Carlo simulation is a generally accepted statistical method used to generate a defined number of stock price paths in order to develop a reasonable estimate of the range of our future expected stock prices and minimizes standard error. The changes in the fair value of these derivative liabilities are estimated quarterly after issuance and are recorded in other income (expense) on the statements of operations.

Significant assumptions used at September 30, 2013 and December 31, 2012 for the warrants and embedded conversion discount derivative liability of the Debentures are as follows:

September 30, 2013 December 31, 2012

Weighted average term	0.7 - 4.2 years	0.2 - 5.0 years	
Volatility	178	% 200	%
Risk-free interest rate	1.39	% 1.05	%

The following table provides a summary of changes in fair value of the Company's liabilities, as well as the portion of losses included in income attributable to unrealized depreciation that relate to those liabilities held at September 30, 2013:

> Fair Value Measurements Using Significant Unobservable Inputs (Level 3)

Significant encoservacie inputs (Eeve	13)
	Warrant
	Liability
Balance at January 1, 2012	\$(3,705,472)
Purchases, sales and settlements:	
Warrants and other derivatives issued	(20,521,554)
Total gains or losses:	
Unrealized depreciation	2,806,750
Balance at January 1, 2013	(21,420,276)
Total gains or losses:	
Unrealized depreciation	983,875
Balance at September 30, 2013	\$(20,436,401)

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8. STOCKHOLDERS' EQUITY

Common Stock

On November 21, 2012, the Company amended its Amended & Restated Certificate of Incorporation to increase the number of shares of common stock that the Company is authorized to issue from 80,000,000 shares to 500,000,000 shares.

On March 27, 2013, in accordance with the amendment to the Registration Rights Agreement, the Company issued an aggregate of approximately 123,809 shares of common stock to the investors in lieu of an aggregate cash payment of \$297,144, representing the first installment of liquidated damages under the Registration Rights Agreement, as amended.

On April 29, 2013, in accordance with the amendment to the Registration Rights Agreement, the Company issued an aggregate of approximately 136,536 shares of common stock to the investors in lieu of an aggregate cash payment of \$327,688, representing the second installment of liquidated damages under the Registration Rights Agreement, as amended.

On May 27, 2013, in accordance with the amendment to the Registration Rights Agreement, the Company issued an aggregate of approximately 120,280 shares of common stock to the investors in lieu of an aggregate cash payment of \$288,674, representing the third and final installment of liquidated damages under the Registration Rights Agreement, as amended.

As of September 30, 2013, the Company had 4,932,200 shares of common stock issued and outstanding and approximately 20,686,092 shares of common stock reserved for issuance upon the exercise of outstanding options, warrants and convertible debentures.

The Company amended its Amended & Restated Certificate of Incorporation, effective as of October 29, 2013, to effect a combination of its common stock at a ratio of 1-for-8 (the "Reverse Split"). The Reverse Split was effective immediately prior to the entry into the Purchase Agreement (see Note 11). The Reverse Split was previously authorized by the stockholders of the Company on November 10, 2010.

As a result of the Reverse Split, all references to our common stock, stock options and warrants and other securities convertible into our common stock, and per share amounts for all prior periods presented have been retroactively restated to reflect the 1-for-8 reverse stock split of our common stock.

Warrants

In accordance with the 2010 sale and issuance of Series A preferred stock, the Company issued two-and-one-half-year "Class A" warrants to purchase an aggregate of 152,740 shares of Series A Preferred Stock at an initial exercise price of \$8.00 per share (the "2010 Class A Warrants") and five-year Class B warrants to purchase an aggregate of 801,885 shares of Series A Preferred Stock at an initial exercise price of \$9.20 per share the "2010 Class B Warrants," and together with the 2010 Class A Warrants, the "2010 Warrants"). Upon the automatic conversion of the Series A

Preferred Stock in January 2011, the 2010 Warrants automatically converted to the right to purchase an equal number of shares of common stock. The terms of the warrants contain an anti-dilutive price adjustment provision, such that, in the event the Company issues common shares at a price below the current exercise price of the 201 Warrants, the exercise price will be decreased pursuant to a customary "weighted-average" formula. Because of this anti-dilution provision and the inherent uncertainty as to the probability of future common share issuances, the Black-Scholes option pricing model the Company uses for valuing stock options could not be used. Management used a Monte Carlo simulation model and, in doing so, utilized a third-party valuation report to determine the warrant liability to be approximately \$0.3 million and approximately \$0.9 million at September 30, 2013 and December 31, 2012, respectively. The Monte Carlo simulation is a generally accepted statistical method used to generate a defined number of stock price paths in order to develop a reasonable estimate of the range of the Company's future expected stock prices and minimizes standard error. This valuation is revised on a quarterly basis until the warrants are exercised or they expire with the changes in fair value recorded in other income (expense) on the statement of operations. The 2010 Class A warrants, representing the right to purchase an aggregate of 152,704 shares of common stock, expired during the nine months ended September 30, 2013.

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NOTES TO CONDENSED FINANCIAL STATEMENTS

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8. STOCKHOLDERS' EQUITY (Continued)

Pursuant to the 2012 Purchase Agreement, the Company issued five-year Series A warrants to purchase an aggregate of approximately 6,190,500 shares of common stock at an initial exercise price of \$4.00 per share and 18-month Series B warrants to purchase an aggregate of approximately 6,190,500 shares of common stock at an initial exercise price of \$2.40 per share. The terms of the 2012 Warrants contain a "full-ratchet" anti-dilutive price adjustment provision. In accordance with such full-ratchet anti-dilution provision, in the event that the Company sells or issues additional shares of common stock, including securities convertible or exchangeable for common stock (subject to customary exceptions), at a per share price less than the applicable 2012 Warrant exercise price, such warrant exercise price will be reduced to an amount equal to the issuance price of such subsequently issued shares; after such time as the Company has raised at least \$12 million in additional equity financing, the 2012 Warrants are subject to further anti-dilution protection based on a weighted-average formula. Further, the anti-dilution provisions of the 2012 Warrants provide that, in addition to a reduction in the applicable exercise price, the number of shares purchasable thereunder is increased such that the aggregate exercise price of the warrants (exercise price per share multiplied by total number of shares underlying the warrants) remained unchanged. Because of this anti-dilution provision and the inherent uncertainty as to the probability of future common share issuances, the Black-Scholes option pricing model the Company uses for valuing stock options could not be used. Management used a Monte Carlo simulation model and, in doing so, utilized a third-party valuation report to determine the warrant liability to be approximately \$14.3 million and \$12.4 million at September 30, 2013 and December 31, 2012, respectively.

In connection with the 2012 offering of the Debentures and 2012 Warrants, the Company engaged Maxim Group LLC, or Maxim Group, to serve as placement agent. In consideration for its services, the Company paid Maxim Group a placement fee of \$1,035,000. In addition, the Company issued to Maxim Partners LLC, or Maxim Partners, an affiliate of Maxim Group, 7,500 shares of common stock and five-year warrants to purchase an additional 283,750 shares of common stock at an initial exercise price of \$2.64 per share. The warrants issued to Maxim Partners are in substantially the same form as the Warrants issued to the investors, except that they do not include certain anti-dilution provisions contained in the Warrants. However, the placement warrants do contain a provision that could require the Company to repurchase the warrants from the holder under certain conditions. Management used a Monte Carlo simulation model and, in doing so, utilized a third-party valuation report to determine the warrant liability to be approximately \$0.4 million and \$0.5 million at September 30, 2013 and December 31, 2012, respectively.

Below is a table that summarizes all outstanding warrants to purchase shares of the Company's common stock as of September 30, 2013.

Grant Date	Warrants Issued	Exercise Price	Weighted Average Exercise Price	Expiration	Exercised	Warrants Outstanding
09/03/2010 09/03/2010 11/26/2012 12/18/2012	132,116 5,293,750	\$ 4.52 \$ 8.80 \$ 2.40 \$ 2.40	\$ 4.52 \$ 8.80 \$ 2.40 \$ 2.40	09/03/2015 09/03/2015 05/26/2014 06/18/2014	- -	801,885 132,116 5,293,750 896,750

11/26/2012 5,293	3,750 \$ 4.00	\$ 4.00	11/26/2017 -	5,293,750
11/26/2012 261,2	250 \$ 2.64	\$ 2.64	11/26/2017 -	261,250
12/18/2012 896,7	750 \$ 4.00	\$ 4.00	12/18/2017 -	896,750
12/18/2012 22,50	00 \$ 2.64	\$ 2.64	12/18/2017 -	22,500
13,59	98,752	\$ 3.32	-	13,598,752

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September 30, 2013 (unaudited)

9. STOCK OPTION PLAN

The Company's 2005 Stock Option Plan (the "Plan") was originally adopted by the Board of Directors of Old Arno in August 2005, and was assumed by the Company on June 3, 2008 in connection with the Merger. After giving effect to the Merger, there were initially 373,831 shares of the Company's common stock reserved for issuance under the Plan. On April 25, 2011, the Company's Board of Directors (the "Board") approved an amendment to the Plan to increase the number of shares of common stock issuable under the Plan to 875,000 shares. On January 14, 2013, the Company's Board of Directors approved an amendment to the Plan to increase the number of shares of common stock issuable under the Plan to 945,276 shares. Under the Plan, incentives may be granted to officers, employees, directors, consultants, and advisors. Incentives under the Plan may be granted in any one or a combination of the following forms: (a) incentive stock options and non-statutory stock options, (b) stock appreciation rights, (c) stock awards, (d) restricted stock and (e) performance shares.

The Plan is administered by the Board, or a committee appointed by the Board, which determines recipients and types of awards to be granted, including the number of shares subject to the awards, the exercise price and the vesting schedule. The term of stock options granted under the Plan cannot exceed 10 years. Options shall not have an exercise price less than the fair market value of the Company's common stock on the grant date, and generally vest over a period of three to four years.

As of September 30, 2013, there are 2,500 shares available for future grants and awards under the Plan, which covers stock options, warrants and restricted awards. The Plan was amended on October 7, 2013, to increase the number of shares of common stock authorized for issuance thereunder to 11,155,295 (see Note 11). The Company issues unissued shares to satisfy stock options, warrants exercises and restricted stock awards.

There were no options granted during the three months ended September 30, 2013. During the nine months ended September 30, 2013, the Company issued 182,937 stock options. The Company did not grant any stock options during the three months ended September 30, 2012. The Company did not grant any stock options during the three and nine months ended September 30, 2012. The Company estimated the fair value of each option award granted using the Black-Scholes option-pricing model. The following assumptions were used for the nine months ended September 30, 2013:

	Nine Months Er	nded
	September 30, 2	2013
Expected volatility	89 - 96	%
Expected term	4 - 6 years	
Dividend yield	0	%
Risk-free interest rate	0.77 - 0.89	%
Stock price	\$ 2.40	
Forfeiture rate	0.0	%

(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONDENSED FINANCIAL STATEMENTS

September 30, 2013 (unaudited)

9. STOCK OPTION PLAN (Continued)

A summary of the status of the options issued under the Plan at September 30, 2013, and information with respect to the changes in options outstanding is as follows:

			Options Outs	stan	ding	
		Shares	Outstanding	W	eighted-	Aggregate
		Available for	Stock	Av	erage	Intrinsic
		Grant	Options	Ex	ercise Price	Value
Balan	ce at January 1, 2013	112,661	722,358	\$	8.88	
Share	s authorized for issuance	70,276	-			
Optio	ns granted under the Plan	(182,938)	182,938	\$	2.40	
Optio	ns exercised	-	-	\$	-	
Optio	ns forfeited	2,500	(2,500)	\$	-	
Balan	ce at September 30, 2013	2,500	902,796	\$	4.05	\$878,682
Exerc	isable at September 30, 2013		614,916	\$	4.78	\$539,227

The following table summarizes information about stock options outstanding at September 30, 2013:

Outstanding			Exercisable				
		Weighted-					
		Average					
		Remaining	W	eighted-		W	eighted-
Exercise		Contractual Life	A	verage		A	verage
Price	Shares	(Years)	E	xercise Price	Shares	Ex	ercise Price
\$ 2.40	738,485	6.59	\$	2.40	455,606	\$	2.40
\$8.00	117,969	0.56	\$	8.00	112,968	\$	8.00
\$ 19.36	37,383	0.19	\$	19.36	37,383	\$	19.36
\$ 24.00	8,959	0.01	\$	24.00	8,959	\$	24.00
Total	902,796	5.96	\$	4.05	614,916	\$	4.78

Stock-based compensation costs under the Plan for the three and nine months ended September 30, 2013 and 2012 and for the cumulative period from August 1, 2005 (inception) through September 30, 2013 are as follows:

	Three months	ended Septemb	er 30\(\)ine months	ended Septembe	er 30 Period from August 1, 2005 (inception)
	2013	2012	2013	2012	through September 30, 2013
Research and development	\$ 107,343	\$ 84,957	\$ 432,025	\$ 197,771	\$ 2,418,635
General and administrative	119,609	96,600	494,225	345,383	2,178,830

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Total \$ 226,952 \$ 181,557 \$ 926,250 \$ 543,154 \$ 4,597,465

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September 30, 2013 (unaudited)

9. STOCK OPTION PLAN (Continued)

The fair value of options vested under the Plan was approximately \$147,080 and \$117,228 for the three months ended September 30, 2013 and 2012, respectively, approximately \$691,884 and \$446,897 for the nine months ended September 30, 2013 and 2012, respectively and approximately \$3,907,447 for the period from August 1, 2005 (inception) through September 30, 2013.

At September 30, 2013, total unrecognized estimated compensation cost related to stock options granted prior to that date was approximately \$954,680, which is expected to be recognized over a weighted-average vesting period of 1.3 years. This unrecognized estimated employee compensation cost does not include any estimate for forfeitures of performance-based stock options.

Common stock, stock options or other equity instruments issued to non-employees (including consultants and all members of the Company's Scientific Advisory Board) as consideration for goods or services received by the Company are accounted for based on the fair value of the equity instruments issued (unless the fair value of the consideration received can be more reliably measured). The fair value of stock options is determined using the Black-Scholes option-pricing model and is expensed as the underlying options vest. The fair value of any options issued to non-employees is recorded as expense over the applicable service periods.

10. RELATED PARTIES

On June 1, 2009, the Company entered into a services agreement with Two River Consulting, LLC ("TRC") to provide various clinical development, operational, managerial, accounting and financial, and administrative services to the Company for a period of one year. David M. Tanen, a director and Secretary of the Company and at the time also its President, Arie S. Belldegrun, M.D., the Chairman of the Board of Directors, and Joshua A. Kazam, a director until September 2010, are each partners of TRC. The terms of the Services Agreement were reviewed and approved by a special committee of the Company's Board of Directors consisting of independent directors. None of the members of the special committee has any interest in TRC or the services agreement. As compensation for the services contemplated by the services agreement, the Company paid TRC a monthly cash fee of \$55,000. The services agreement with TRC expired on April 1, 2011 and until a new agreement is in place, TRC is billing the Company for actual hours worked on a monthly basis. For the three and nine months ended September 30, 2013, TRC billed the Company \$73,723 and \$217,849, respectively. For the three and nine months ended September 30, 2012, TRC has billed the Company \$66,806 and \$199,631, respectively. For the period from inception to September 30, 2013, TRC has billed the Company a total of \$1,961,090.

On occasion, some of the Company's expenses are paid by TRC. No interest is charged by TRC on any outstanding balance owed by the Company. For the three and nine months ended September 30, 2013 and 2012 and for the period from August 1, 2005 (inception) through September 30, 2013 services and reimbursed expenses totaled \$82,188, \$242,391, \$76,240, \$247,369, and \$2,373,608, respectively. As of September 30, 2013, the Company had a payable to TRC of \$28,685, which was paid in full during the fourth quarter 2013.

The financial condition and results of operations of the Company, as reported, are not necessarily indicative of results that would have been reported had the Company operated completely independently.

11. SUBSEQUENT EVENTS

Amendment to 2005 Stock Option Plan

On October 7, 2013, the Company's Board of Directors adopted an amendment to the Company's 2005 Plan, as amended that increased the number of shares of common stock authorized for issuance thereunder from 945,276 to 11,155,295.

(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONDENSED FINANCIAL STATEMENTS

September 30, 2013 (unaudited)

11. SUBSEQUENT EVENTS (Continued)

Management Stock Option Awards

On October 7, 2013, the Board approved a planto grant 10-year stock options under the 2005 Plan to each of Glenn Mattes, the Company's President and Chief Executive Officer, Alexander Zukiwski, M.D., the Company's Chief Medical Officer, and Stefan Proniuk, Ph.D., the Company's Vice President, Product Development, to purchase 5.5%, 4.5% and 0.65%, respectively, of the number of shares issued by the Company upon the conversion of the Debentures (the "Management Options"). The effective grant date of the Management Options was November 4, 2013, following the complete conversion of the Debentures pursuant to the Conversion Agreement, and the exercise price was fixed at \$2.40 per share, reflecting the fair market value of the common stock. The total number of shares subject to the Management Options granted to Mr. Mattes, Dr. Zukiwski and Dr. Proniuk was 386,697, 314,582 and 45,701 shares, respectively. The right to purchase the shares subject to the Management Options will vest in 36 equal monthly installments commencing on the first month anniversary of the date of grant and continuing each month thereafter until fully vested, provided that such vesting shall accelerate upon a "change of control" of the Company, as such term is defined under the 2005 Plan (but excluding any transaction conducted primarily for purposes of raising capital).

Non-Employee Director Compensation

On October 7, 2013, the Board also adopted a standard compensation plan applicable to its non-employee directors (the "Director Compensation Plan"), pursuant to which the Company's non-employee directors are entitled to cash and equity-based compensation for their services as directors of the Company. Further, on November 4, 2013, and in accordance with the Director Compensation Plan, the Board granted to each non-employee director, 10-year stock options under the 2005 Plan to purchase, at an exercise price of \$2.40 per share, a number of shares of Common Stock equal to 0.10% of the then outstanding shares of Common Stock determined on a fully-diluted basis (i.e., assuming the issuance of all shares issuable upon the exercise or conversion of the Company's outstanding options, warrants or other rights to acquire Common Stock, but excluding all shares reserved for issuance under the 2005 Plan ("Fully-Diluted Basis")); provided, that the Company's Chairman of the Board shall instead be granted a stock option to purchase 0.20% of the outstanding shares of Common Stock determined on a Fully-Diluted Basis (collectively the "Director Options").

In addition to the Director Options described above, on November 4, 2013, the Board made one-time grants of 10-year stock options to Arie Belldegrun, M.D., the Company's Chairman of the Board, and Steven Ruchefsky, to purchase a number of shares of Common Stock equal to 5.0% and 0.2%, respectively, of the shares of Common Stock outstanding on the effective date of such grant, determined on a Fully-Diluted Basis. Such options are subject to the same terms and conditions applicable to the Director Options.

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NOTES TO CONDENSED FINANCIAL STATEMENTS

September 30, 2013 (unaudited)

11. SUBSEQUENT EVENTS (Continued)

Securities Purchase Agreement

On October 29, 2013, the Company entered into a Securities Purchase Agreement (the "2013 Purchase Agreement") with certain purchasers identified therein (the "Purchasers") pursuant to which the Company sold and the Purchasers purchased, an aggregate of 12,868,585 units of the Company's securities (the "Units"), with each Unit consisting of the following:

- either (a) one share of common stock (each a "Share," and collectively, the "Shares"), or (b) a five-year common (i) stock warrant to purchase one share of common stock (collectively, the "Series C Warrant Shares") at an exercise
- price of \$0.01 per share (collectively, the "Series C Warrants");
- (ii) a five-year warrant to purchase one share of common stock (collectively, the "Series D Warrant Shares") at an exercise price of \$4.00 per share (collectively, the "Series D Warrants"); and
- a warrant, expiring on October 31, 2014, to purchase one share of common stock (collectively, the "Series E Warrant Shares," and together with the Series C Warrant Shares and the Series D Warrant Shares, the "Warrant Shares") at an exercise price of \$2.40 per share (collectively, the "Series E Warrants," and together with the Series C Warrants and the Series D Warrants, the "2013 Warrants").

The Company sold and issued 8,413,354 Units consisting of Shares, Series D Warrants and Series E Warrants at a purchase price of \$2.40 per Unit, and 4,455,231 Units consisting of Series C Warrants, Series D Warrants and Series E Warrants at a purchase price of \$2.39 per Unit, for total gross proceeds to the Company of \$30.84 million, before deducting fees and other transaction related expenses of approximately \$750,000. A closing of the sale of 12,826,752 Units was completed on October 29, 2013, and the sale of the remaining 41,833 Units was completed on October 30, 2013.

The Purchase Agreement contains customary representations, warranties and covenants by each of the Company and the Purchasers. In addition, the Purchase Agreement provides that each Purchaser has a right, subject to certain exceptions described in the agreement, to participate in future issuances of equity and debt securities by the Company for a period of 18 months following the effective date of the Registration Statement (defined below under "Registration Rights Agreement").

Terms of the 2013 Warrants

Under the terms of the 2013 Purchase Agreement, each Purchaser had the option to elect to receive a Series C Warrant in lieu of a Share in connection with each Unit it purchased. The Series C Warrants have a five-year term and are exercisable at an initial exercise price of \$0.01 per share. The Series D Warrants have a five-year term and are exercisable at an initial exercise price of \$4.00 per share, subject to adjustment for stock splits, combinations, recapitalization events and certain dilutive issuances (as described below). The Series E Warrants are exercisable until October 31, 2014 at an initial exercise price of \$2.40 per share, subject to adjustment for stock splits, combinations, recapitalization events and certain dilutive issuances (as described below). The applicable exercise price of the Series

D Warrants and Series E Warrants (but not the Series C Warrants) is subject to a weighted-average price adjustment in the event the Company makes future issuances of common stock or rights to acquire common stock (subject to certain exceptions) at a per share price less than the applicable warrant exercise price. The Series D Warrants may be redeemed by the Company at a price of \$0.01 per Warrant Share if, in addition to certain other conditions specified in such 2013 Warrants, for a period of 10 consecutive trading days following the effective date of a Securities Act registration statement covering the resale of the 2013 Warrant shares, the volume-weighted average price is at least \$12.00 and the average daily trading volume of the common stock is at least 100,000 shares on each day during such 10-day period (in each case, subject to adjustment for stock splits, combinations and similar recapitalization events).

(A DEVELOPMENT STAGE COMPANY)

NOTES TO CONDENSED FINANCIAL STATEMENTS

September 30, 2013 (unaudited)

11. SUBSEQUENT EVENTS (Continued)

The 2013 Warrants are required to be exercised for cash, provided that if during the term of the Warrants there is not an effective registration statement under the Securities Act covering the resale of the shares issuable upon exercise of the Warrants, then the Warrants may be exercised on a cashless (net exercise) basis.

Registration Rights Agreement

Contemporaneously with the entry into the Purchase Agreement, and as contemplated thereby, the Company entered into a Registration Rights Agreement with the Purchasers. Pursuant to the terms of the Registration Rights Agreement, the Company agreed to file, on or before December 30, 2013 (the "Filing Date"), a registration statement under the Securities Act covering the resale of the Shares and Warrant Shares (the "Registration Statement"), and to cause such Registration Statement to be declared effective by the Commission as soon as practicable thereafter, but not later than 120 days following the date of the Registration Rights Agreement (the "Effectiveness Date"). If the Company does not file the Registration Statement by the Filing Date or obtain its effectiveness by the Effectiveness Date, then the Company is required to pay liquidated damages to the Purchasers in an amount equal to 1% of the aggregate purchase price paid by such Purchaser for the Units per month until the Registration Statement is filed or declared effective, as applicable, subject to a maximum of 10% of the aggregate purchase price paid by each Purchaser for the Units. The Company is required to maintain the effectiveness of the Registration Statement until all of the shares covered thereby are sold or may be sold pursuant to Rule 144 under the Securities Act without volume or manner of- sale restrictions and without the requirement that the Company be in compliance with the current public information requirements of Rule 144.

Conversion of 2012 Debentures

On October 29, 2013, the Company also entered into a Conversion Agreement (the "Conversion Agreement") with all of the holders (the "Holders") of its Debentures issued on November 26, 2012 and December 18, 2012 (See Note 6) in the original principal amount of \$14,857,000.

Pursuant to the Conversion Agreement, the Holders agreed to convert the entire outstanding principal amount of their Debentures, together with accrued and unpaid interest through October 29, 2013, into shares of the Company's common stock at a conversion price of \$2.40 per share for a total of approximately 6,530,154 shares. As a result of such conversion, all of the Company's obligations under the Debentures are fully satisfied.

As additional consideration for their agreement to convert the Debentures, the Company provided each Holder with one year of additional accrued interest at 8% per annum and extended the term of the Series B Warrants issued to the Holders in connection with their initial purchase of the Debentures to October 31, 2014. The additional year of accrued interest was satisfied by the issuance of shares of common stock at a price of \$2.40 per share for a total additional issuance of approximately 494,764 shares of common stock. The Company recorded the inducement to convert the debentures as additional interest expense.

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NOTES TO CONDENSED FINANCIAL STATEMENTS

September 30, 2013 (unaudited)

11. SUBSEQUENT EVENTS (Continued)

Agreement with OPKO Health, Inc.

On October 29, 2013, in connection with the entry into the 2013 Purchase Agreement, the Company entered into an agreement (the "OPKO Agreement") with OPKO Health, Inc. ("OPKO") and Frost Group, LLC ("Frost Group"). Under the terms of the OPKO Agreement, as an inducement to the participation by OPKO and Frost Group (or its affiliates and associates) in the purchase and sale of the Units under the Purchase Agreement, the Company granted OPKO with the following rights, so long as OPKO continues to hold at least 3% of the total number of outstanding shares of the Company's common stock, determined on a fully-diluted basis (i.e., assuming the issuance of all shares underlying outstanding options, warrants and other rights to acquire common stock): (1) OPKO shall have the right to appoint a non-voting observer to attend all meetings of the Company's Board of Directors, provided that such appointee enters into a confidentiality agreement with the Company and shall be subject to all applicable Company policies; and (2) OPKO shall have a right of first negotiation that provides it with exclusive rights to negotiate with the company for a 45-day period regarding any potential strategic transactions that the Company's Board of Directors elects to pursue.

Amendments to Articles of Incorporation or Bylaws

The Company amended its Amended & Restated Certificate of Incorporation, effective as of October 29, 2013, to effect a combination of its common stock at a ratio of 1-for-8 (the "Reverse Split"). The Reverse Split was effective immediately prior to the entry into the Purchase Agreement. The Reverse Split was authorized by the stockholders of the Company on November 10, 2010.

38,671,405 Shares		
Common Stock		
PROSPECTUS		

January 27, 2014