Arno Therapeutics, Inc
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OFFERING PROSPECTUS

26,753,061 Shares

Common Stock

The selling stockholders identified beginning on page 16 of this prospectus are offering on a resale basis a total of 26,753,061 shares of our common stock, of which 15,593,074 shares were issued upon the conversion of our Series A Convertible Preferred Stock (including 319,074 shares of common stock issued as payment of accrued dividends upon conversion of our Series A Convertible Preferred Stock) and 8,693,930 shares 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 eligible for quotation on the OTC Bulletin Board under the symbol "ARNI.OB." However, there is not currently an active trading market for our common stock on the OTC Bulletin Board or otherwise. The selling stockholders identified herein will be required to sell the common stock registered hereunder at a fixed price of $1.00 per share until such time as a market for our common stock develops. At and after such time, the selling stockholders may sell our common stock at the prevailing market price or at a privately negotiated price. See "Plan of Distribution."

The securities offered by this prospectus involve a high degree of risk.

See "Risk Factors" beginning on page 5.

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 May 14, 2012.

TABLE OF CONTENTS

PROSPECTUS SUMMARY	3
RISK FACTORS	5
NOTE REGARDING FORWARD-LOOKING STATEMENTS	15
USE OF PROCEEDS	16
SELLING STOCKHOLDERS	16
ADDITIONAL DISCLOSURE REGARDING TRANSACTIONS BETWEEN THE COMPANY AND THE SELLING STOCKHOLDERS	19
PLAN OF DISTRIBUTION	21
DESCRIPTION OF CAPITAL STOCK	23
MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS	24
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	25
OUR BUSINESS	31
MANAGEMENT AND BOARD OF DIRECTORS	43
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	48
TRANSACTIONS WITH RELATED PERSONS, PROMOTERS AND CERTAIN CONTROL PERSONS	51
WHERE YOU CAN FIND MORE INFORMATION	51
VALIDITY OF COMMON STOCK	51
EXPERTS	51
TRANSFER AGENT	51
DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES	51
FINANCIAL STATEMENTS	F-1

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*** – We recently acquired rights to onapristone, an anti-progestin hormone blocker that has been shown to have considerable anti-tumor activity in breast cancer. Onapristone appears to have a unique ability to block the activated progesterone receptor and inhibit tumor growth. Onapristone was originally developed by Schering AG for potential use as 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. In connection with the development of onapristone, we intend to develop a companion diagnostic product to identify patients who express activated progesterone and therefore may benefit from treatment with onapristone. We intend to conduct pre-clinical toxicology studies and manufacturing activities and to file an IND by the second quarter of 2013.

- ***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 multiple myeloma, chronic lymphocytic leukemia, or CLL, or lymphoma. 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). We expect to identify the maximum tolerated dose, or MTD, or a recommended Phase II dose, or RP2D, for AR-42 by the end of 2012. Once the MTD is defined, the study is designed so that additional subjects with hematological malignancies can be added to investigate efficacy and safety in a particular disease and help guide future Phase II programs. Up to an additional 10 study subjects may be enrolled at the RP2D in each of multiple myeloma, CLL and lymphoma. The protocol has been amended to include a solid tumor cohort and we expect

patient accrual to the solid tumor cohort to begin in the second quarter of 2012. We expect that the expansion phase of the hematological malignancy cohort will take at least 12 months to complete.

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 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. 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 safety of AR-12 in order to identify the MTD or RP2D for future studies of the compound. We anticipate that the Escalation Phase will be completed in the third quarter of 2012. We also anticipate the determination of an RP2D or MTD with the conclusion of the Escalation Phase in the third quarter of 2012. 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 a novel and improved formulation that has been shown to substantially increase the bioavailability in preclinical models.

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.

In May 2009, we voluntarily filed a Form 15 with the Securities and Exchange Commission in order to terminate the registration of our common stock under the Securities and Exchange Act of 1934, as amended, or the Exchange Act. As a result, our obligation to file periodic and other reports under the Exchange Act was suspended. 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.

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 pharmaceutical 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 5 of this prospectus.

The Offering

The selling stockholders identified beginning on page 16 of this prospectus are offering on a resale basis a total of 26,753,061 shares of our common stock, of which 15,593,074 shares were issued upon the conversion of our Series A Convertible Preferred Stock (including 319,074 shares of common stock issued as payment of accrued dividends upon conversion of our Series A Convertible Preferred Stock) and 8,693,930 shares are issuable upon the exercise of outstanding warrants. The total value of all the common stock (including shares of common stock that are issuable upon exercise of warrants) offered pursuant to this prospectus is approximately $26.8 million, based upon a per share price of $1.00. Of this total amount, approximately $15.6 million represents the value of the shares of common stock offered pursuant to this prospectus that were issued upon the conversion of our Series A Convertible Preferred Stock on February 9, 2011. See “Plan of Distribution.”

Common stock offered	26,753,061 shares
Common stock outstanding before the offering[(1)]	36,304,942 shares
Common stock outstanding after the offering[(2)]	44,998,872 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.
OTC Bulletin Board Symbol	ARNI.OB

(1) Based on the number of shares outstanding as of May 1, 2012, not including 14,993,048 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.

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. Based on our current development plans, we believe we have cash on hand to fund our operations through approximately the third quarter of 2012. 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 restricted 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 years ended December 31, 2011 and 2010, we had a net loss of $7,909,113 and $4,023,026, respectively. For the period from our inception on August 1, 2005 through December 31, 2011, we had a net loss of $35,513,000. 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 years ended December 31, 2011 and 2010, we had negative cash flows from operating activities of $6,833,566 and $3,533,085, respectively. Since inception on August 1, 2005 through December 31, 2011, we have had negative cash flows from operating activities of $28,736,704. 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, we 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. 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, 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 Vice President – Finance 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 and Messrs. Kash, 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.

6

We are substantially dependent on the services of TRC and other consultants.

We have only four employees. We currently rely heavily on TRC 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, which include the persons affiliated with TRC discussed above, beneficially own approximately 58% 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 Ltd. ("Pontifax"), Commercial Street Capital, LLC ("Commercial Street Capital"), and UTA Capital LLC ("UTA Capital") beneficially own approximately 12.1%, 9.0%, and 8.2% 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 Kariv, 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 affect 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.

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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.

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 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 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.

11

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 trade secrets, know-how or other proprietary information is disclosed, the value of our trade secrets, 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 trade secret protection and

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 trade secrets, 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 trade secrets, know-how or other proprietary information is disclosed, the value of our trade secrets, 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., the University of Pittsburgh 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.

In January 2012, we received a written notice from the University of Pittsburgh that we have failed to satisfy an annual payment of $250,000 required to be paid under our license agreement for AR-67. The notice demanded that we make the payment within 60 days, or we would be in default under the agreement. On March 29, 2012, following our determination not to proceed with further development of AR-67, we agreed with the university to terminate the license agreement, resulting in the loss of our rights to AR-67.

Risks Related to Our Securities

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 OTC Bulletin Board, or the OTCBB. Stocks traded on the OTCBB 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 American 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.

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 26,753,061 shares of our common stock, as follows:

- 18,059,131 shares that are currently issued and outstanding, including:

- 15,274,000 shares issued on February 9, 2011 upon the automatic conversion of our Series A Preferred Stock;

- 319,074 shares issued on February 9, 2011 as payment of 5% accrued dividends upon the conversion of our Series A Preferred Stock; and

- 8,693,930 shares that are issuable upon the exercise of outstanding warrants.

The following table sets forth the number of shares of our common stock beneficially owned by the selling stockholders as of May 1, 2012, 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
3071341 Canada Inc. (2)	79,129	25,352	12,500	41,277	*
6984321 Canada Inc. (3)	19,401	6,084	3,000	10,317	*

87111 Canada Limited (4)	99,768	25,352	12,500	61,916	*
Alan T. Yuasa as Trustee of the Michael J. Shimoko Trust	152,095	102,095	50,000	-	-
Allan Pantuck and Jodi Pantuck (JTWROS)	18,251	12,251	6,000	-	-
Allen Rubin (5)	19,401	6,084	3,000	10,317	*
Alrac Investments Inc. (6)	18,926	12,676	6,250	-	-
Arie and Rebecka Belldegrun as Trustees of the Belldegrun Family Trust dated February 18, 1994 (7)	1,360,025	127,619	62,500	599,548	1.3
Benjamin Bernstein (8)	553,504	-	75,000	478,504	1.1
Canyon Value Realization Fund (Cayman) Ltd. (9)	1,011,330	687,651	-	-	-
Canyon Value Realization Fund, L.P. (9)	1,011,330	263,069	-	-	-
Canyon Value Realization Mac-18 Ltd. (9)	1,011,330	60,610	-	-	-
Clal Finance Underwriting Ltd. (10)	3,127,781	9,968	-	-	-
Clal Insurance Company Ltd. – Profit Participating Policies (10)	3,127,781	1,540,249	350,000	-	-
Clal Pension & Provident Funds Ltd. – Sapir (10)	3,127,781	684,363	133,000	-	-
Clal Pension & Provident Funds Ltd. – Yahalom (10)	3,127,781	343,201	67,000	-	-
Commercial Street Capital, LLC (11)	3,381,109	2,246,109	1,100,000	35,000	*
DAFNA Life Science Ltd. (12)	152,095	24,503	12,000	-	-
DAFNA Life Science Market Neutral Ltd. (12)	152,095	18,377	9,000	-	-
DAFNA Life Science Select Ltd. (12)	152,095	59,215	29,000	-	-
David M. Tanen (13)	1,625,449	66,362	87,652	1,471,435	3.3
Dikla Insurance Company Ltd. (14)	28,577	9,485	4,648	14,444	*
Esperante AB (15)	760,479	510,479	250,000	-	-
FCC Ltd (16)	772,587	306,287	456,300	10,000	*
Genesis Capital Advisors, LLC (17)	2,129,341	153,143	75,000	-	-
Genesis Opportunity Fund, LP (17)	2,129,341	1,276,198	625,000	-	-
Georgette Pagano	38,023	25,523	12,500	-	-
Hank C.K. Wuh	37,852	25,352	12,500	-	-
Harel Insurance Company Ltd. (18)	819,675	207,512	101,681	377,688	*
Harel Pension Fund Management Company Ltd. (18)	819,675	53,291	26,113	377,688	*
Harel Provident Funds Ltd. (18)	819,675	35,832	17,558	377,688	*
I-Bankers Securities, Inc. (19)	207,339	81,589	40,000	-	-
IBS Securities Ltd. (19)	207,339	-	85,750	-	-
Ilan Lapidot	60,000	-	60,000	-	-
Ira Kalfus	53,233	35,733	17,500	-	-

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
Isaac Kier (20)	275,424	51,047	25,000	199,377	*
Joia Kazam and Joshua Kazam (JTWROS) (21)	2,045,256	255,239	125,000	1,597,323	3.5
Joshua Kazam (21)	2,045,256	-	67,694	1,597,323	3.5
Kappa Investors LLC (22)	3,891,777	171,531	84,005	2,005,789	4.5
Kardan Israel Ltd. (23)	1,520,958	1,020,958	500,000	-	-
Kenzo Kosuda	76,047	51,047	25,000	-	-
Leumi Overseas Trust Corporation Limited as Trustee of the BTL Trust (7)	1,360,025	255,239	125,000	599,548	1.3
MDRB Partnership, L.P. (7)	1,360,025	127,619	62,500	599,548	1.3
Nazy Zomorodian	45,628	30,628	15,000	-	-
Ogier Employee Benefit Trust Limited as Trustees of the MBES Employee Benefit Trust – JD Sub Trust (24)	152,095	102,095	50,000	-	-
Peter Kash (25)	1,990,606	-	129,534	1,708,977	3.8
Peter Kash and Donna Kash (JTWROS) (25)	1,990,606	102,095	50,000	1,708,977	3.8
Pontifax (Cayman) II L.P. (26)	4,572,875	1,497,248	733,256	10,000	*
Pontifax (Israel) II - Individual Investors L.P. (26)	4,572,875	437,807	214,410	10,000	*
Pontifax (Israel) II L.P. (26)	4,572,875	1,127,820	552,334	10,000	*
Primafides (Suisse) SA as Trustees of the Sirius Trust (27)	693,901	102,095	50,000	541,806	1.2
Ricardo de la Guardia	38,023	25,523	12,500	-	-
Robert I. Falk (28)	417,318	102,095	50,000	265,223	*
Sabrinco Inc. (29)	39,563	12,676	6,250	20,637	*
Scott Navins (30)	249,532	-	100,000	149,532	*
Sherry Hyon	7,500	-	7,500	-	-
Steven Blum (31)	194,781	-	125,000	69,781	*
Steven Ruchefsky (11)	3,381,109	-	25,000	10,000	*
Susumu Maeda	76,047	51,047	25,000	-	-
Taichi Wakabayashi	76,047	51,047	25,000	-	-
UTA Capital LLC (32)	3,041,917	2,041,917	1,000,000	-	-
Uzi Zucker	456,287	306,287	150,000	-	-
Wexford Spectrum Investors LLC (22)	3,891,777	1,094,457	535,995	2,005,789	4.5
Yu Yeung (33)	39,937	-	20,000	19,937	*
TOTAL		18,059,131	8,693,930		

* denotes less than 1%

(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 44,998,872 shares of common stock, including all shares offered hereby that are issuable upon the exercise of warrants.

(2) Ruth Hornstein is the president and sole owner of the selling stockholder. In addition to the shares offered hereby, the selling stockholder beneficially owns 41,277 shares of our common stock.

(3) Daniel Ritter is the president of the selling stockholder. In addition to the shares offered hereby, beneficial ownership includes 10,317 shares of our common stock held by Mr. Ritter.

(4) Herschel Schachter, president of the selling stockholder, holds voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, the selling stockholder beneficially owns 61,916 shares of our common stock.

(5) In addition to the shares offered hereby, the selling stockholder beneficially owns 10,317 shares of our common stock.

(6) Lawrence Stein is the director of the selling stockholder.

(7) In addition to the shares offered hereby, beneficial ownership includes 24,922 shares of our common stock and 512,710 shares issuable upon the exercise of stock options held by Arie Belldegrun, M.D, and 61,916 shares of our common stock held by the BTL Trust. Dr. Belldegrun, who serves as Chairman of our Board of Directors, is a beneficiary of the BTL Trust and is the managing partner of MDRB. 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 the BTL Trust.

(8) In addition to the shares offered hereby, the selling stockholder beneficially owns 478,504 shares of our common stock, which includes 59,813 shares issuable upon the exercise of warrants.

(9) John Simpson, Joshua S. Friedman, Mitchell R. Julius and John P. Plaga have voting and/or dispositive power over the shares held by the selling stockholder. The selling stockholder has informed us that it is affiliated with a broker-dealer, and has represented to us that it purchased the shares in the ordinary course of business with no agreement or understanding, directly or indirectly, with any persons regarding the distribution of the shares.

(10) Beneficial ownership includes: (i) 825,578 shares of our common stock held by Clal Insurance Company Ltd. – Profit Participating Policies; (ii) 412,788 shares of our common stock held by Clal Pension & Provident Funds Ltd. – Sapir ("Sapir"); (iii) 206,393 shares of our common stock held by Clal Pension & Provident Funds Ltd. – Yahalom ("Yahalom"); and (iv) 9,968 shares of our common stock held by Clal Finance Underwriting Ltd. Yossi Dori holds voting and/or dispositive power over the shares held by Sapir and Yahalom. Nir Moroz holds voting and/or dispositive power over the shares held by Clal Insurance Company Ltd. – Profit Participating Policies.

(11) Steven Ruchefsky, President of Commercial Street Capital, LLC, is a director of Arno. In addition to the shares offered hereby, beneficial ownership also includes 35,000 shares of our common stock issuable upon the exercise of options held by Mr. Ruchefsky.

(12) Fariba Ghodsian is the managing member of the selling stockholder.

(13) Mr. Tanen is our President and a member of our board of directors. Shares listed as beneficially owned by Mr. Tanen include 149,532 shares of our common stock held by Mr. Tanen's wife as custodian for the benefit of their minor children under the Uniform Gift to Minors Act (UGMA), for which Mr. Tanen disclaims any beneficial ownership. In addition to the shares offered hereby, beneficial ownership also includes 1,307,334 shares of our common stock and 102,221 shares issuable upon the exercise of options and warrants held by Mr. Tanen.

(14) Alfred Rosenfeld and Ofer Nargassi hold voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership includes: (i) 4,127 shares of our common stock held by Dikla Insurance Company Ltd. – Nostro; and (ii) 10,317 shares of our common stock held by Dikla Insurance Company Ltd. – Siudi.

(15) Dean Slagel, director of the selling stockholder, holds voting and/or dispositive power over the shares held by the selling stockholder.

(16) Yacov Reizman, chairman and chief executive officer of the selling stockholder, and Rivka Reizman, president of the selling stockholder, hold voting and/or dispositive power over the shares held by the selling stockholder. Mr. Reizman is a director of Arno. In addition to the shares offered hereby, beneficial ownership also includes 10,000 shares of our common stock issuable upon the exercise of options held by Mr. Reizman.

(17) Ethan Benovitz is the managing member of the selling stockholder.

(18) Ronen Agassi and Ofer Nargassi hold voting and/or dispositive power over the shares held by the selling stockholder. In addition to the shares offered hereby, beneficial ownership includes: (i) 20,637 shares of our common stock held by Harel Insurance Company Ltd. – Clali; (ii) 115,580 shares of our common stock held by Harel Insurance Company Ltd. – Mishtatefet; (iii) 45,406 shares of our common stock held by Harel Insurance Company Ltd. – Nostro; (iv) 41,277 shares of our common stock held by Harel Pension Fund Management Company Ltd. – Harel Pensia; (v) 28,893 shares of our common stock held by Harel Provident Funds Ltd. – Taoz; (vi) 10,317 shares of our common stock held by Harel Provident Funds, Ltd. – Hishtalmut; (vii) 8,254 shares of our common stock held by Harel Provident Funds, Ltd. – Gmisha; and (viii) 107,324 shares of our common stock held by Harel Provident Funds, Ltd. – Otzma.

(19) Shelley Gluck holds voting and/or dispositive power over the shares held by the selling stockholder. I-Bankers Securities, Inc. ("I-Bankers") is a registered broker-dealer and the shares offered by I-Bankers are issuable upon the exercise of warrants received as compensation for placement agent services in connection with our September 2010 private placement. IBS Securities Ltd. ("IBS") is an affiliate of I-Bankers and acquired the shares offered hereby in the ordinary course of its business.

(20) In addition to the shares offered hereby, the selling stockholder beneficially owns 199,377 shares of our common stock.

(21)

Shares listed as beneficially owned by the selling stockholders include, in addition to the shares offered hereby, (i) 1,129,759 shares of our common stock and 14,946 shares issuable upon the exercise of options and warrants held by Mr. Kazam; (ii) 99,688 shares of our common stock held by Mrs. Kazam as custodian for the benefit of their minor daughter under the UGMA; (iii) 332,293 shares of our common stock held by the Kazam Family Trust; and (iv) 20,637 shares of our common stock held by the Joshua Kazam Trust.

(22) In addition to the shares offered hereby, beneficial ownership includes: (i) 247,345 shares of our common stock held by Kappa Investors LLC ("Kappa"); (ii) a warrant held by Kappa to purchase 24,732 shares of our common stock that is exercisable at $2.42 per share; and (iii) 1,733,712 shares of our common stock held by Wexford Spectrum Investors LLC ("Wexford Spectrum"). Wexford Capital LP, a Delaware partnership ("Wexford Capital"), is a registered Investment Advisor and also serves as an investment advisor or sub-advisor to the members of Kappa and Wexford Spectrum. Wexford GP LLC ("Wexford GP") is the general partner of Wexford Capital. Mr. Charles E. Davidson and Mr. Joseph M. Jacobs are managing and controlling members of Wexford GP.

(23) Eytan Rechter is chief executive officer and a director of the selling stockholder and Asher Elmoznino is chief financial officer of the selling stockholder.

(24) Tania Bearryman and Donna Laverty hold voting and/or dispositive power over the shares held by the selling stockholder.

(25) Peter Kash is a member of our board of directors. Shares listed as beneficially owned by Mr. Kash include 358,876 shares of our common stock held by Mr. Kash's wife as custodian for the benefit of their minor children under the UGMA, for which Mr. Kash disclaims any beneficial ownership. In addition to the shares offered hereby, beneficial ownership also includes 1,327,629 shares of our common stock and 22,472 shares issuable upon the exercise of options and warrants held by Mr. Kash.

(26) 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 10,000 shares of our common stock issuable upon the exercise of options held by Mr. Kariv.

(27) Ari Tatos, Nigel Mifsud, Magali Garcia-Baudin, David Moran, Phillippe De Salis and Ewald Scherrer 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 selling stockholder. In addition to the shares offered hereby, the selling stockholder beneficially owns 541,806 shares of our common stock.

(28) In addition to the shares offered hereby, beneficial ownership includes: (i) 49,844 shares of our common stock and warrants to purchase 4,946 shares of our common stock at an exercise price of $2.42 per share held by Falk Family Partners, LP, of which Mr. Falk is General Partner; and (ii) 90,744 shares of our common stock and vested options held by Mr. Falk to purchase 119,689 shares of our common stock.

(29) Samuel Gewurz is the president and sole owner of the selling stockholder. In addition to the shares offered hereby, the selling stockholder beneficially owns 20,637 shares of our common stock.

(30) In addition to the shares offered hereby, Mr. Navins, who serves as Arno's Treasurer, beneficially owns 149,532 shares of our common stock.

(31) In addition to the shares offered hereby, the selling stockholder beneficially owns 69,781 shares of our common stock, which includes 29,906 shares issuable upon the exercise of warrants.

(32) YZT Management LLC ("YZT") is the managing member of the selling stockholder. Udi Toledano is the managing member of YZT and holds voting and/or dispositive power over the shares held by the selling stockholder.

(33) In addition to the shares offered hereby, the selling stockholder beneficially owns 19,937 shares of our common stock.

ADDITIONAL DISCLOSURE REGARDING TRANSACTIONS

BETWEEN THE COMPANY AND THE SELLING STOCKHOLDERS

Payments in connection with the September 2010 Private Placement

The following table summarizes the total payments to the selling stockholders and affiliates in connection with our September 2010 private placement.

	Total amounts paid
Placement Fees (1)	$ 1,056,930
Placement Warrants (2)	464,720
Total payments	$ 1,521,650

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(1) In consideration for their services as placement agents, we paid Riverbank a cash placement fee of $789,880, and we paid I-Bankers, Riverbank's sub-agent, a cash placement fee of $267,050.

(2) In addition to the cash fees described in footnote (1), we also issued five-year warrants to purchase an aggregate of 1,056,930 shares of Series A Preferred Stock at an initial exercise price of $1.10 per share to the placement agents and their designees (consisting of warrants to purchase an aggregate of 664,880 shares to designees of Riverbank and warrants to purchase an aggregate of 392,050 shares to I-Bankers and its designees). The Placement Warrants were valued at $464,720 using the Black-Scholes option-pricing model. The shares issuable upon exercise of the Placement Warrants are being offered by this prospectus.

In addition to the payments reflected above relating to our September 2010 private placement, we have also historically paid a monthly consulting fee of $55,000 to Two River Consulting, LLC, an entity that is controlled by Arie S. Belldegrun, Joshua A. Kazam and David M. Tanen, each of whom are selling stockholders or affiliates of

selling stockholders. See “Transactions with Related Persons, Promoters and Certain Control Persons.”

Comparison of Issuer Proceeds to Potential Selling Stockholder Profit.

The following table provides a comparison of the gross proceeds to the Company from the September 2010 private placement to: (i) the total payments to the selling stockholders and affiliates (summarized above under “—Payments in connection with the September 2010 Private Placement”); and (ii) the resulting net proceeds to the Company. None of the securities held by the selling stockholders or their affiliates provides for any conversion discount.

Gross Company Proceeds from September 2010 Private Placement	$15,274,000	
Payments to Selling Stockholders	1,521,650	
Net Company Proceeds from September 2010 Private Placement	$13,752,350	
Payments to Selling Stockholders as a Percentage of Net Company Proceeds from September 2010 Private Placement	11.1	%

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 affiliates. For additional information regarding the terms of these transactions, please see “Note 10 – Stockholders’ Equity,” in the accompanying Notes to Financial Statements.

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 the Selling Stockholder in the Transaction	Shares Issued or Issuable in Transaction as a Percentage of Shares held by Non-Affiliates (2)	Market Price Per Share Immediately Prior to the Transaction	Current Market Price Per Share (3)
3071341 Canada Inc.	6/2/08	9,968,797	4,169,985	41,277	1.0	$ 2.42	$ 1.00
6984321 Canada Inc.	6/2/08	9,968,797	4,169,985	10,317	*	$ 2.42	$ 1.00
87111 Canada Limited	6/2/08	9,968,797	4,169,985	61,916	1.5	$ 2.42	$ 1.00
Allen Rubin	6/2/08	9,968,797	4,169,985	10,317	*	$ 2.42	$ 1.00
Belldegrun Selling Stockholders (4)	8/9/05	-	-	24,922	N/A	$ 0.0005	$ 1.00
	6/2/08	9,968,797	4,169,985	61,916	1.5	$ 2.42	$ 1.00
Benjamin Bernstein (5)	8/9/05	-	-	418,691	N/A	$ 0.0005	$ 1.00
	1/2/08	9,968,797	4,169,985	59,813	1.4	$ 2.42	$ 1.00
Canyon Selling Stockholders (6)	6/2/08	9,968,797	4,169,985	1,011,330	24.3	$ 2.42	$ 1.00
Clal Selling Stockholders (7)	8/9/05	-	-	9,968	N/A	$ 0.0005	$ 1.00
	6/2/08	9,968,797	4,169,985	1,444,759	34.6	$ 2.42	$ 1.00
David M. Tanen (8)	8/9/05	-	-	1,434,183	N/A	$ 0.0005	$ 1.00
	6/2/08	9,968,797	4,169,985	23,918	*	$ 2.42	$ 1.00
Dikla Insurance Company Ltd. (9)	6/2/08	9,968,797	4,169,985	14,444	*	$ 2.42	$ 1.00
Harel Selling Stockholders (10)	6/2/08	9,968,797	4,169,985	377,688	9.1	$ 2.42	$ 1.00
Isaac Kier	8/9/05	-	-	199,377	N/A	$ 0.0005	$ 1.00
Kazam Selling Stockholders (11)	8/9/05	-	-	1,512,273	N/A	$ 0.0005	$ 1.00
	6/2/08	9,968,797	4,169,985	75,050	1.8	$ 2.42	$ 1.00
Kash Selling Stockholders (12)	8/9/05	-	-	1,641,135	N/A	$ 0.0005	$ 1.00
	6/2/08	9,968,797	4,169,985	47,841	1.1	$ 2.42	$ 1.00
Primafides (Suisse) SA as Trustees of the Sirius Trust (13)	8/9/05	-	-	199,377	N/A	$ 0.0005	$ 1.00
	6/2/08	9,968,797	4,169,985	342,429	8.2	$ 2.42	$ 1.00
Robert I. Falk (14)	8/9/05	-	-	49,844	N/A	$ 0.0005	$ 1.00
	6/2/08	9,968,797	4,169,985	95,690	2.3	$ 2.42	$ 1.00
Sabrinco Inc.	6/2/08	9,968,797	4,169,985	20,637	*	$ 2.42	$ 1.00
Scott Navins	8/9/05	-	-	149,532	N/A	$ 0.0005	$ 1.00
Steven Blum (15)	8/9/05	-	-	39,875	N/A	$ 0.0005	$ 1.00
	1/2/08	9,968,797	4,169,985	29,906	*	$ 2.42	$ 1.00
Wexford Selling Stockholders (16)	6/2/08	9,968,797	4,169,985	2,005,798	47.8	$ 2.42	$ 1.00
Yu Yeung	8/9/05	-	-	19,937	N/A	$ 0.0005	$ 1.00

* 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) There is not currently a market for our common stock. See “Plan of Distribution.”

(4) On August 9, 2005, 24,922 founders shares were issued to Bellco Capital, Inc. In connection with our June 2, 2008 private placement, 61,916 shares of common stock were issued to Leumi Overseas Trust Corporation Limited as Trustees of the BTL Trust.

(5) On August 9, 2005, 418,691 founders shares were issued to Mr. Bernstein. On January 2, 2008, five-year warrants to purchase 59,813 shares of common stock at an exercise price of $2.42 per share, the fair market value at the time of issuance, were issued to Mr. Bernstein in exchange for consulting services.

(6) In connection with our June 2, 2008 private placement: (i) 687,651 shares of common stock were issued to Canyon Value Realization Fund (Cayman) Ltd.; (ii) 263,069 shares were issued to Canyon Value Realization Fund, L.P.; and (iii) 60,610 shares were issued to Canyon Value Realization Mac-18 Ltd.

(7) On August 9, 2005, 9,968 founders shares were issued to Clal Finance Underwriting Ltd. In connection with our June 2, 2008 private placement: (i) 825,578 shares of common stock were issued to Clal Insurance Company Ltd. – Profit Participating Policies; (ii) 412,788 shares were issued to Clal Pension & Provident Funds Ltd. – Sapir; and (iii) 206,393 shares were issued to Clal Pension & Provident Funds Ltd. – Yahalom.

(8) On August 9, 2005: (i) 1,284,651 founders shares were issued to David M. Tanen; and (ii) 149,532 founders shares were issued to Mr. Tanen’s wife as custodian for the benefit of their minor children under the Uniform Gift to Minors Act (UGMA). In connection with our June 2, 2008 private placement: (i) 22,682 shares of common stock were issued to Mr. Tanen; and (ii) five-year warrants to purchase 1,236 shares of common stock at an exercise price of $2.42 per share were issued to Mr. Tanen.

(9) In connection with our June 2, 2008 private placement: (i) 4,127 shares of common stock were issued to Dikla Insurance Company Ltd. – Nostro; and (ii) 10,317 shares were issued to Dikla Insurance Company Ltd. – Siudi.

(10) In connection with our June 2, 2008 private placement: (i) 20,637 shares of common stock were issued to Harel Insurance Company Ltd. – Clali; (ii) 115,580 shares were issued to Harel Insurance Company Ltd. – Mishtatefet; (iii) 45,406 shares were issued to Harel Insurance Company Ltd. – Nostro; (iv) 41,277 shares were issued to Harel Pension Fund Management Company Ltd. – Harel Pensia; (v) 28,893 shares were issued to Harel Provident Funds Ltd. – Taoz; (vi) 10,317 shares were issued to Harel Provident Funds, Ltd. – Hishtalmut; (vii) 8,254 shares were issued to Harel Provident Funds, Ltd. – Gmisha; and (viii) 107,324 shares were issued to Harel Provident Funds, Ltd. – Otzma.

(11) On August 9, 2005: (i) 1,080,292 founders shares were issued to Joshua Kazam; (ii) 99,688 founders shares were issued to Mr. Kazam's wife as custodian for the benefit of their minor daughter under the UGMA; and (iii) 332,293 founders shares were issued to the Kazam Family Trust. In connection with our June 2, 2008 private placement: (i) 20,637 shares of common stock were issued to the Joshua Kazam Trust; (ii) 49,467 shares were issued to Mr. Kazam; and (iii) five-year warrants to purchase 4,946 shares of common stock at an exercise price of $2.42 per share were issued to Mr. Kazam.

(12) On August 9, 2005: (i) 1,282,259 founders shares were issued to Peter Kash; and (ii) 358,876 founders shares were issued to Mr. Kash's wife as custodian for the benefit of their minor children under the UGMA. In connection with our June 2, 2008 private placement: (i) 45,369 shares of common stock were issued to Mr. Kash; and (ii) five-year warrants to purchase 2,472 shares of common stock at an exercise price of $2.42 per share were issued to Mr. Kash.

(13) On August 9, 2005, 199,377 founders shares were issued to the selling stockholder. In connection with our June 2, 2008 private placement: (i) 330,064 shares of common stock were issued to the selling stockholder; and (ii) five-year warrants to purchase 12,365 shares of common stock at an exercise price of $2.42 per share were issued to the selling stockholder.

(14) On August 9, 2005, 49,844 founders shares were issued to Falk Family Partners, LLC. In connection with our June 2, 2008 private placement: (i) 41,277 shares of common stock were issued to Mr. Falk; (ii) 49,467 shares were issued to Falk Family Partners, LLC; and (iii) five-year warrants to purchase 4,946 shares of common stock at an exercise price of $2.42 per share were issued to Falk Family Partners, LLC.

(15) On August 9, 2005, 39,875 founders shares were issued to Mr. Blum. On January 2, 2008, five-year warrants to purchase 29,906 shares of common stock at an exercise price of $2.42 per share, the fair market value at the time of issuance, were issued to Mr. Blum in exchange for consulting services.

(16) In connection with our June 2, 2008 private placement: (i) 1,733,712 shares of common stock were issued to Wexford Spectrum Investors, LLC; (ii) 247,354 shares were issued to Kappa Investors, LLC; and (iii) five-year warrants to purchase 24,732 shares of common stock at an exercise price of $2.42 per share were issued to Kappa Investors, LLC.

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. There is not currently a market for our common stock. The selling stockholders identified herein will be required to sell the common stock (including shares of common stock issued upon conversion of preferred stock and exercise of warrants) registered hereunder at a fixed price of $1.00 per share until such time as a market for our common stock develops. At and after such time, any dispositions by the selling stockholders may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. 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.

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

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

- a combination of any such methods of sale; and

- any other method permitted pursuant to applicable law.

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

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

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

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

The selling stockholders might be, and any broker-dealers that act in connection with the sale of securities will be, deemed to be “underwriters” within the meaning of Section 2(11) of the Securities Act, and any commissions received by such broker-dealers and any profit on the resale of the securities sold by them while acting as principals will be deemed to be underwriting discounts or commissions under the Securities Act.

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

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

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

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

We have agreed with the selling stockholders to keep the registration statement that includes this prospectus effective until the earlier of (1) such time as all of the shares covered by this prospectus have been disposed of pursuant to and in accordance with the registration statement or (2) the date on which the shares may be sold without restriction pursuant to Rule 144 of 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 44,998,872 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 authorizes us to issue 115,000,000 shares of capital stock, par value $0.0001 per share, comprised of 80,000,000 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:

- 36,304,942 shares of our common stock,
- options to purchase 5,803,866 shares of our common stock at exercise prices ranging from $1.00 to $3.00 per share, and

· warrants to purchase 9,189,182 shares of our common stock at exercise prices ranging from $1.00 to $2.42 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. As of the date of this prospectus, our 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.

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.

23

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Market Information

Our common stock is currently eligible for trading on the OTC Bulletin Board, or the OTCBB; however, there have been only a few trades in our common stock since we filed an application to deregister our common stock in May 2009. The historical trading of our common stock has been extremely limited and sporadic. Accordingly, there is not an established public trading market for our common stock.

Between May 2009 and April 2011, our common stock was eligible for trading on the "Pink Sheets," where the sole trade was reported on April 9, 2010. Prior to May 2009, our common stock traded on the OTCBB, where the first trade was reported in June 2008. Until July 16, 2008, our common stock traded under the symbol "LRRI.OB." Following our merger with Laurier completed on June 3, 2008, our trading symbol changed to "ARNI.OB" on July 17, 2008. 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 or the OTCBB, 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, 2010	$-	$-
June 30, 2010	$0.51	$0.51
September 30, 2010	$-	$-
December 31, 2010	$-	$-
March 31, 2011	$-	$-
June 30, 2011	$-	$-
September 30, 2011	$-	$-
December 31, 2011	$1.50	$1.50

Holders

According to the records of our transfer agent, American Stock Transfer & Trust Company, as of May 1, 2012, we had approximately 253 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 Amended and Restated 2005 Stock Option Plan, which has been approved by our stockholders. The following table sets forth certain information as of December 31, 2011 with respect to our Amended and Restated 2005 Stock Option Plan:

Plan category	Number of Securities to be Issued Upon Exercise of Outstanding Options (A)	Weighted-Average Exercise Price of Outstanding Options (B)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (A)) (C)
Equity compensation plans approved by security holders:			
2005 Stock Option Plan	6,628,555	$ 1.09	51,601
Equity compensation plans not approved by stockholders:			
None	—	—	—
Total	6,628,555	$ 1.09	51,601

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*** – We recently acquired rights to onapristone, an anti-progestin hormone blocker that has been shown to have considerable anti-tumor activity in breast cancer. Onapristone appears to have a unique ability to block the activated progesterone receptor and inhibit tumor growth. Onapristone was originally developed by Schering AG for potential use as 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. In connection with the development of onapristone, we intend to develop a companion diagnostic product to identify patients who express activated progesterone and therefore may benefit from treatment with onapristone. We intend to conduct pre-clinical toxicology studies and manufacturing activities and to file an IND by the second quarter of 2013.

- ***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 multiple myeloma, chronic lymphocytic leukemia, or CLL, or lymphoma. 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). We expect to identify the maximum tolerated dose, or MTD, or a recommended Phase II dose, or RP2D, for AR-42 by the end of 2012. Once the MTD is defined, the study is designed so that additional subjects with hematological malignancies can be added to investigate efficacy and safety in a particular disease and help guide future Phase II programs. Up to an additional 10 study subjects may be enrolled at the RP2D in each of multiple myeloma, CLL and lymphoma. The protocol has been amended to include a solid tumor cohort and we expect patient accrual to the solid tumor cohort to begin in the second quarter of 2012. We expect that the expansion phase

of the hematological malignancy cohort will take at least 12 months to complete.

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 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. 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 safety of AR-12 in order to identify the MTD or RP2D for future studies of the compound. We anticipate that the Escalation Phase will be completed in the third quarter of 2012. We also anticipate the determination of an RP2D or MTD with the conclusion of the Escalation Phase in the third quarter of 2012. 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 a novel and improved formulation that has been shown to substantially increase the bioavailability in preclinical models.

- ***AR-67*** – AR-67 is a novel, third-generation camptothecin analogue that inhibits Topoisomerase I activity. In 2008, we completed a multi-centered, ascending dose Phase I clinical trial of AR-67 in patients with advanced solid tumors. AR-67 is currently being studied in a Phase II clinical trial in patients with glioblastoma multiforme, or GBM, a highly aggressive form of brain cancer. Due to the low response rate among patients in the study, we have determined not to proceed with further development of AR-67 and instead plan to focus our available resources on our other product candidates, particularly onapristone and AR-42.

We have no product sales to date and we will not generate any product revenue until we receive approval from the U.S. Food and Drug Administration, or 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, a significant amount of our development expenses have related to two of our product candidates: AR-12 and AR-67. As we proceed with the clinical development of our product candidates, 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, personnel recruiting fees, 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

General and Administrative Expenses. G&A expenses for the years ended December 31, 2011 and 2010 were approximately $2.0 million and $0.9 million, respectively. This increase of approximately $1.1 million over 2010 is primarily attributable to an increase of approximately $0.6 million in personnel costs, including stock compensation expense related to the hiring of a full-time CEO in April 2011 and an executive assistant in June 2011, as no paid employees held those positions during the same period in 2010. Additionally, there is an approximately $0.2 million increase in legal and accounting fees related to the Company's public filings as a result of becoming a public reporting company during the first quarter of 2011. The Company was not publicly reporting during 2010 and, therefore, did not incur such costs. Additionally, there were increases of approximately $0.1 million in board fees and travel and entertainment expenses over 2010 due to increased board and management activities compared to 2010.

Research and Development Expenses. R&D expenses for the years ended December 31, 2011 and 2010 were approximately $5.7 million and $4.1 million, respectively. The increase of approximately $1.6 million over 2010 is primarily due to an increase of approximately $0.9 million relating to manufacturing and regulatory activities for AR-42 in 2011 related to potential clinical studies in 2012 and beyond, with no such activities in 2010. Additionally, there was an increase of approximately $0.6 million in employee compensation costs related to the hiring of a chief medical officer in June 2011 and a clinical operation manager in January 2011, with no employees in such positions during the same period of 2010. There was also an increase of approximately $0.1 million in costs relating to

meetings with scientific advisors and for traveling to various contractor sites in 2011, with minimal amounts of such activities during the same period of 2010. There was also an expense of approximately $0.1 million in 2011 for certain consultants providing guidance to management regarding the development prioritizations for our licensed compounds with no such expenses during 2010.

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, 2011 and 2010, as well as the cumulative amounts since we began development of each product candidate through December 31, 2011. The table also summarizes unallocated costs, which consist of personnel, facilities and other costs not directly allocable to development programs:

	Years Ended December 31,		Cumulative amounts during development
	2011	2010	
Onapristone	$ 26,418	$ -	$ 26,418
AR-12	1,860,377	2,037,367	8,842,888
AR-67	554,220	484,279	7,665,217
AR-42	1,035,642	74,653	4,031,477
Unallocated R&D	2,214,179	1,543,255	7,742,078
Total	$ 5,690,836	$ 4,139,554	$ 28,308,078

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. Onapristone 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. In connection with the development of onapristone, we intend to develop a companion diagnostic product to identify patients who express activated progesterone and therefore may benefit from treatment with onapristone. We intend to conduct pre-clinical toxicology studies and manufacturing activities and to file an IND by the second quarter of 2013. Based on our current development plans for onapristone, we anticipate spending approximately $2.6 million on external development costs during the fiscal year 2012, including a one-time cash payment of $0.5 million to Invivis upon execution of the license agreement in February 2012.

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. 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). Based on our current development plans for AR-42, we anticipate spending approximately $1.7 million on external development costs during the fiscal year 2012.

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 anticipate that the Escalation Phase will be completed in 2012. 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 we plan to conduct further clinical development of AR-12 with a novel and improved formulation that has shown to increase the bioavailability in preclinical models. Based on our current development plans for AR-12, we anticipate spending approximately $0.5 million on external development costs during the fiscal year 2012.

AR-67. AR-67 is currently being studied in a Phase II clinical study in patients with glioblastoma multiforme, or GBM, a highly aggressive form of brain cancer. Due to the low response rate among patients in the study, we have determined not to proceed with further development of AR-67 and instead plan to focus our available resources on our other programs, particularly onapristone and AR-42. Based on our current development plans for AR-67, which include the completion of the Phase II GBM study, we anticipate spending approximately $0.3 million on external development costs during the fiscal year 2012.

Our expenditures on current and future clinical development programs are expected to be substantial, particularly in relation to our available capital resources, and to increase. 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 and timing of manufacturing our drug candidates; and
- the costs, requirements, timing of, and the ability to secure regulatory approvals.

Interest Income. Interest income for the years ended December 31, 2011 and 2010 was $28,771 and $19,339. The increase in interest income over 2010 is due to higher average cash balances levels as a result of our September 2010 private placement.

Other Income (Expense). 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 with no such charges in 2010. For the year ended December 31, 2010, we had other income of approximately $1.0 million which consisted primarily of the approximately $0.7 million in funding received under the IRS Qualifying Therapeutic Discovery Project for our product candidates and proceeds from our sale of approximately $4.0 million of New Jersey net operating losses pursuant to our participation in the New Jersey Tax Benefit Transfer Program.

Liquidity and Capital Resources

The following tables summarize our liquidity and capital resources as of and for each of the last two fiscal years, and is intended to supplement the more detailed discussion that follows. The amounts stated are expressed in thousands.

	Year Ended December 31,	
Liquidity and capital resources	2011	2010
Cash and cash equivalents	$6,678	$13,528
Working capital	$5,012	$11,782
Stockholders' equity	$1,356	$8,436

	Year Ended December 31,		Period from August 1, 2005 (inception) to December 31,
Cash flow data	2011	2010	2011
Cash provided by (used in):			
Operating activities	$(6,833)	$(3,533)	$ (28,737)
Investing activities	(23)	-	(185)
Financing activities	6	13,974	35,600
Net increase (decrease) in cash and cash equivalents	$(6,850)	$10,441	$ 6,678

Our total cash resources as of December 31, 2011 were approximately $6.7 million compared to approximately $13.5 million as of December 31, 2010. As of December 31, 2011, we had approximately $5.7 million in liabilities (of which approximately $3.7 million represented a non-cash warrant liability), and approximately $5.0 million in net working capital. Since August 1, 2005 (inception) through December 31, 2011, we have incurred an aggregate net loss of approximately $35.5 million, while negative cash flow from operating activities has amounted to approximately $28.7 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.

From inception through December 31, 2011, 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 or operations, or if such funds are available to us,

that such additional financing will be sufficient to meet our needs.

Based on our resources at December 31, 2011, we believe we have sufficient capital to fund our planned operating activities through approximately the third quarter of 2012. However, based on the various options for future clinical studies of onapristone, AR-42 and AR-12, our projected cash needs beyond the third quarter of 2012 are difficult to predict. In addition, there are other factors which may also cause our actual cash requirements to vary materially, including the changes in the focus and direction of our research and development programs, including 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 market our products as planned or continue development and regulatory approval of our products, 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.

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. Potential sources of financing include strategic relationships, public or private sales of equity or debt and other sources. We may seek to access the public or private equity markets when conditions are favorable due to our long-term capital requirements. We do not have any committed sources of financing at this time, and it is uncertain whether additional funding will be available when we need it on terms that will be acceptable to us, or at all. If we raise funds by selling additional shares of common stock or other securities convertible into common stock, the ownership interests of our existing stockholders will be diluted. If we are not able to obtain financing when needed, we may be unable to carry out our business plan. As a result, we may have to significantly limit our operations and our business, financial condition and results of operations would be materially harmed. In such an event, we will be required to undertake a thorough review of our programs and the opportunities presented by such programs and allocate our resources in the manner most prudent.

To the extent that we raise additional funds by issuing equity or convertible or non-convertible debt securities, our stockholders may experience additional significant dilution and such financing may involve restrictive covenants. To the extent that we raise additional funds through collaboration and licensing arrangements, it may be necessary to relinquish some rights to our technologies or our product candidates, or grant licenses on terms that may not be favorable to us. These things may have a material adverse effect on our business.

The continuation of our business beyond the third quarter of 2012 is dependent upon obtaining further long-term financing, the successful development of our drug product candidates and related technologies, the successful and sufficient market acceptance of any product offerings that we may introduce, and, finally, the achievement of a profitable level of operations. The issuance of additional equity securities by us may result in a significant dilution in the equity interests of current stockholders. Obtaining commercial loans, assuming those loans would be available, on acceptable terms or even at all, will increase our liabilities and future cash commitments.

Off -Balance Sheet Arrangements

There were no off-balance sheet arrangements as of December 31, 2011.

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, stock-based compensation, and warrant liability. 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, costs relating to obtaining and maintaining our product license agreements, legal expenses resulting from intellectual property prosecution, 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 Amended and Restated 2005 Stock Option Plan.

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 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 $1.00 based on the following factors. The stock was publicly trading at $1.00 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%.

In conjunction with the September 2010 financing, our management estimated the fair value of our common stock using a Monte Carlo simulation model and, in doing so, relied in part upon 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 2010 and 2011. 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.

We have minimal historical basis for determining expected forfeitures and, as such, compensation expense for stock-based awards does not include an estimate for forfeitures.

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 Candidate	Indications	**Commercial Rights**	Ongoing Studies / Status
Onapristone	Breast and endometrial cancer	Arno	Manufacture of drug substance and drug product is currently underway. Pre-clinical toxicology will be initiated upon availability of drug substance. Work has been initiated on a companion diagnostic intended to enhance selection of patients most likely to benefit from treatment with onapristone.
AR-42	Hematological malignancies	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 patients with advanced or recurrent hematological malignancies and solid tumors for which standard treatment has failed or not proven to be effective.
AR-12	Solid tumors and hematological malignancies	Arno	A two part, multi-centered Phase I clinical trial of AR-12 is ongoing in patients with solid tumors and lymphoma who have progressed despite treatment with other therapies.

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 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.

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 2012. According to a 2011 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 2010 were $102.8 billion. With a 67% 5-year relative survival rate for all cancers from 2001-2007, 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 breast cancer. Onapristone appears to have a unique ability to block the activated progesterone receptor, which is believed to be the mechanism by which it may inhibit the growth of breast and endometrial tumors. Onapristone was originally being developed by Schering AG for potential use as 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. In connection with the development of onapristone, we intend to develop a companion diagnostic to identify patients who express the activated form of the progesterone receptor and therefore may have an enhanced likelihood to benefit from treatment with onapristone. During 2012, we intend to conduct pre-clinical toxicology studies and manufacturing activities that will enable us to file an investigational new drug application, or IND, with the U.S. Food and Drug Administration, or the FDA, in 2013.

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 we have not identified if these receptors are functional and playing a role in tumor growth. A better diagnostic test may aide in selecting patients who are most likely to benefit from "hormone" treatment including onapristone.

Onapristone is a type 1 anti-progestin. 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 transcription resulting in death or differentiation of the malignant cell.

Potential Advantages

In prior clinical studies, onapristone had 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. Clinical studies of onapristone are intended to evaluate safety and efficacy which may provide women with breast and endometrial cancer an additional treatment option and allow a delay in the time for which patients may need chemotherapy treatment.

Clinical Development

We do not currently have sufficient supply of drug substance and drug product to conduct necessary preclinical animal toxicology studies, which will enable us to evaluate onapristone in clinical studies with human subjects. Accordingly, our immediate development activities with respect to onapristone will be focused on manufacturing drug substance and drug product under "good manufacturing practice," or GMP, conditions. In addition, we plan to focus on the development of a companion diagnostic that will help to identify patients whose tumors express the activated progesterone receptor, which we believe are most likely to respond to onapristone.

Following completion of the planned preclinical studies and our development of a companion diagnostic, we intend to file an IND with the FDA seeking to commence a dose escalation Phase I study of onapristone in patients with endometrial and breast cancer.

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 Zolinza®), 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 no treatment is available. 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 has been declared and we expect to identify the recommended dose for further study for patients with solid tumors by the fourth quarter of 2012.

The ongoing study is designed so that additional patients with hematological malignancies can be added to investigate the efficacy of AR-42 in a particular disease and help guide future Phase II programs once the recommended dose for further study has been defined. Up to an additional 10 patients may be enrolled at the recommended phase 2 dose in each of the following disease cohorts: CLL/small lymphocytic lymphoma, multiple myeloma, and lymphoma. We expect this expansion phase will take at least 12 months to complete.

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.

33

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 are currently enrolling subjects 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 is being 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 also anticipate the determination of a RP2D or MTD with the conclusion of the Escalation Phase in the third quarter of 2012. 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 a novel and 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 will provide important information to direct future studies, in terms of safety, pharmacokinetics and potential efficacy. We also believe that the biomarkers and pharmacodynamic assays planned for 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.

AR-67

Camptothecin and its analogues, together referred to as camptothecins, are a class of drugs widely used to treat certain types of cancers, with worldwide annual sales exceeding $660 million, according to Thomson Reuters Pharma. Camptothecins treat cancer by disrupting cell division through the inhibition of topoisomerase I, a critical enzyme in DNA replication. Through this inhibition and additional mechanisms of action, camptothecins target cancer cells preferentially to normal tissues, making them a promising class of drugs in this indication. AR-67 is a novel, third-generation camptothecin analogue that has demonstrated high potency in pre-clinical studies and improved pharmacokinetic properties in humans as compared with first and second-generation products.

We are currently conducting a multi-center, two-cohort Phase II clinical trial of AR-67 in patients with glioblastoma multiforme, or GBM, a highly aggressive form of brain cancer. We have completed patient enrollment in this Phase II study, which evaluates the safety and efficacy of AR-67 as a treatment for patients with GBM that have progressed on other therapies. The first cohort enrolled patients who had progressed rapidly (within 90 days) after treatment with Avastin, a drug approved in this indication. These patients' cancer normally progresses quite aggressively, and the endpoint for this cohort is two months of progression-free survival. We closed enrollment in this cohort due to a lack of clinical response among the first 13 patients that were enrolled. The second cohort was designed to enroll up to 32 subjects who had not received Avastin treatment in the past 90 days. The primary endpoint of the second cohort is six months of progression-free survival. To date, we have completed enrollment of all 32 subjects, with five subjects still receiving AR-67. To date, only a small number of subjects have achieved the primary endpoint of six months of progression-free survival. Due to this low response rate, we have determined not to proceed with further development of AR-67 and instead plan to focus our available resources on our other product candidates, particularly onapristone and AR-42.

Moreover, in January 2012, we received a notice from the University of Pittsburgh, from which we licensed our rights to AR-67, indicating that we were in default under our license agreement for failure to pay an annual license fee under the terms of that agreement and providing us with 60 days' notice to remedy the default. On March 29, 2012, following our determination not to proceed with further development of AR-67, we agreed with the university to terminate the

license agreement. We are currently working with the university to wind down our AR-67 program, and intend to fulfill our ongoing obligations in connection with the completion of the Phase II GBM study.

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 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 Zolinza®), 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 Pharmaceuticals, Inc., or 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; provided, however, that we have an option to acquire French commercial rights from Invivis upon notice to Invivis together with a cash payment.

Under our license agreement for onapristone, we have 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 of onapristone and/or a companion diagnostic product. If the pending patent application issues, the issued patent would be scheduled to expire in 2031.

Under the terms of our license agreement with Invivis, we made a one-time cash payment of $500,000 to Invivis upon execution of the license agreement. 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 1 clinical trial of onapristone. 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, actions, demands, judgments, losses, costs, expenses, damages and liabilities (including reasonable attorneys' fees) 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, (c) result from a breach of warranty by Invivis, or (d) 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 (a) the last to expire valid claim contained in the patent rights, and (b) 20 years. Invivis may generally terminate the 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.

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. 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

Our rights to AR-67 were governed by an October 2006 license agreement with the University of Pittsburgh. Under this agreement, we held 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.

On January 12, 2012, we received a written notice from the university, indicating that we were in default under the license agreement due to our failure to pay an annual payment of $250,000 under the terms of the agreement and providing us with 60 days' notice to remedy the default. On March 29, 2012, following our determination not to proceed with further development of AR-67, we agreed with the university to terminate the license agreement.

Under the terms of our license agreement with the University of Pittsburgh, we made a one-time cash payment of $350,000 to the university and reimbursed it for past patent expenses. Additionally, the university was entitled to performance-based cash payments of up to an aggregate of $4.0 million upon successful completion of clinical and regulatory milestones relating to AR-67.

Under the license agreement with the University of Pittsburgh, we also agreed to indemnify and hold the university 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 us or any affiliate or sublicensee of the licensed patent; or (iii) any obligation of us under the license agreement unless any such claim is determined to have arisen out of the gross negligence, recklessness or willful misconduct of the university.

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 with vendors 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 $5.7 million in fiscal year 2011 and $4.1 million in fiscal year 2010 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 December 31, 2011, we had six full-time employees, none of whom are covered by a collective bargaining agreement. During January 2012, our Chief Operations Officer and Senior Clinical Study Manager resigned from the Company. We believe our relations with our employees are satisfactory.

We utilize clinical research organizations and third parties to perform our pre-clinical studies, clinical studies, and manufacturing. We are currently engaged in an active search for additional research and development staff, as required, to support our product development.

Legal Proceedings

We are not involved in any pending legal proceedings and are not aware of any threatened legal proceedings against us.

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.	62	Chairman of the Board
Glenn Mattes	56	President, Chief Executive Officer and Director
Alexander Zukiwski, M.D.	54	Vice President, Chief Medical Officer
David M. Tanen	40	Secretary and Director
Scott L. Navins	40	Treasurer
Stefan Proniuk, Ph.D.	41	Vice President of Product Development
William F. Hamilton, Ph.D.	72	Director
Tomer Kariv	51	Director
Yacov Reizman	60	Director
Steven B. Ruchefsky	50	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 Two River Group Management, LLC, the managing member of Two River Group Holdings, LLC, and 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 Party 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. In September 2004, Mr. Tanen co-founded Two River Group Holdings, LLC ("Two River"), a venture capital firm that specializes in the creation of new companies that acquire rights to commercially develop biotechnology products, and currently serves as Vice President and Director of Two River's managing member, Two River Group Management, LLC. 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 Party 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.

Stefan Proniuk, Ph.D. has over 12 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 2 NDAs, 8 INDs, 1 IMPD, 1 CTA, and 3 marketed products. Dr. Proniuk holds a Ph.D. degree in Pharmaceutical Sciences from the University of Arizona, a MBA with emphasis in Entrepreneurship from San Diego State University and a Diplom (FH) in Chemical Engineering from the Polytechnical University Isny in Germany. He is also certified in Intellectual Property Law from the University of California San Diego.

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 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 and Aposense 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 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 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, MD Solar Sciences, Inc. Mr. Ruchefsky is a graduate of The George Washington University Law School.

Scott L. Navins has served as Arno's Treasurer since its inception, 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 Vice President of Finance at Two River Group Holdings, LLC ("Two River") and Two River Consulting, LLC, 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.

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 and Tanen 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.

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 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 2011 and 2010 fiscal years awarded to, earned by or paid to (i) all individuals serving as our principal executive officer during the fiscal year ended December 31, 2011; and (ii) two other individuals that served as an executive officer at the conclusion of the fiscal year ended December 31, 2011 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 ($)	Bonus ($)	Stock Awards (1) ($)	Option Awards (1) ($)	All Other Compensation (2) ($)	Total ($)
Glenn R. Mattes (3) President and CEO	2011	68,590	120,342	172,750	1,098,200	12,750	1,472,632
Alexander Zukiwski, M.D. (4) VP and Chief Medical Officer	2011	197,596	100,000	–	854,000	6,500	1,158,096
David M. Tanen (5)	2011	–	–	–	–	–	–
Former President	2010	–	–	–	–	–	–
J. Chris Houchins (6)	2011	225,000	–	–	256,200	–	481,200
Former Chief Operating Officer	2010	209,756	102,422	–	–	–	312,178

(1) Amounts reflect the grant date fair value of stock awards and option awards granted under the Company's 2005 Stock Option Plan, computed pursuant to Financial Accounting Standards Board's Accounting Standards Codification 718 *"Compensation – Stock Compensation"*.

(2) Amounts represent automobile allowances.

(3) Mr. Mattes was appointed President and Chief Executive Officer on April 25, 2011.

(4) Dr. Zukiwski was appointed Vice President, Chief Medical Officer on June 22, 2011.

(5) Mr. Tanen served as Arno's President from June 8, 2009 until the appointment of Mr. Mattes as President and Chief Executive Officer on April 25, 2011. Mr. Tanen, who also serves as a director, did not receive compensation for his service as President. However, Two River Consulting, LLC did receive compensation for Mr. Tanen's services as President of Arno. See "Certain Relationships and Related Transactions, and Director Independence." Mr. Tanen also receives compensation for his service as a director in accordance with the terms of our non-employee director compensation plan. See "—Director Compensation."

(6) Mr. Houchins resigned his employment with us, effective as of January 13, 2012.

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

Glenn Mattes

President and Chief Executive Officer

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%. 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. 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 2,354,379 shares of our common stock at an exercise price equal to $1.00 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 215,872 shares. In addition, Mr. Mattes was granted 250,000 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.

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. 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. 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 1,750,000 shares of our common stock at an exercise price equal to $1.00 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 154,224 shares.

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.

J. Chris Houchins

Former Chief Operating Officer

Mr. Houchins' employment with us was governed by a letter agreement dated September 12, 2007, as amended on August 26, 2010. Under the letter agreement, which provided for Mr. Houchins' employment with us on an at-will basis, Mr. Houchins was entitled to an annual base salary of 180,000, which was subsequently increased to 207,500 on January 1, 2009 and to $225,000 on November 16, 2010. In addition, Mr. Houchins was eligible to receive an annual performance bonus of up to 25% of his base salary upon the successful completion of annual corporate and individual milestones. The letter agreement also provided for the awarding of certain stock options to Mr. Houchins, referred to as Employment Options. On September 17, 2007, Mr. Houchins was granted ten-year Employment Options to purchase 99,689 shares of our common stock at an exercise price of $1.00, with one-quarter vesting after one year and the remainder vesting in 36 equal monthly installments thereafter. On September 29, 2009, Mr. Houchins was granted ten-year Employment Options to purchase 200,000 shares of our common stock at an exercise price of $1.00, vesting in three equal annual installments commencing on the first anniversary of the grant date. In addition, on June 20, 2011, Mr. Houchins was granted 10-year options to purchase a total of 525,000 shares of our common stock at an exercise price equal to $1.00 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 25% of the shares subject to the Employment Options vested immediately and, of the remaining shares, 25% were scheduled to vest 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 was scheduled to vest, if at all, in three equal annual installments, subject to the successful achievement of specific performance objectives to be established by the Board. As a result of Mr. Houchins' resignation, which was effective January 13, 2012, all future vesting under his options was forfeited. To the extent vested, Mr. Houchins' options will remain exercisable for a 90-day or three-month period following his resignation, after which the options will terminate.

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, 2011:

Name	Number of Securities Underlying Unexercised Options Exercisable	**Number of Securities Underlying Unexercised Options Unexercisable**	**Option Exercise Price ($)**	**Option Expiration Date**	
Mr. Tanen	10,000	-	1.00	9/29/19	(1)
	3,333	6,667	1.00	11/5/20	(2)
Mr. Houchins (3)	99,689	-	1.00	9/17/17	(4)
	133,333	66,667	1.00	9/29/19	(5)
	52,500	236,250	1.00	6/20/21	(6)
	-	236,250	1.00	6/20/21	(7)
Mr. Mattes	215,872	725,880	1.00	4/25/21	(8)
	-	1,412,627	1.00	4/25/21	(9)
Dr. Zukiwski	154,224	720,776	1.00	6/22/21	(10)
	-	875,000	1.00	6/22/21	(11)

(1) Option granted on September 29, 2009, as compensation for Mr. Tanen's services as a director prior to his appointment as our President. The option vested in three equal installments on each of November 1, 2009, November 1, 2010, and November 1, 2011.

(2) Option granted November 5, 2010 and vests in three equal annual installments commencing on the first anniversary of the grant date.

(3) Mr. Houchins resigned as Arno's Chief Operating Officer effective as of January 13, 2012. Unless otherwise noted, each of Mr. Houchins' stock options will terminate 90 days thereafter.

(4) Option granted September 17, 2007 relating to an aggregate of 99,689 shares, of which 25% vested on the first anniversary of the grant date and the remainder vested in 36 equal monthly installments thereafter.

(5) Option granted September 29, 2009 and was scheduled to vest in three equal annual installments commencing on the first anniversary of the grant date. Following the vesting of the first two installments, the final installment, relating to 66,667 shares, was forfeited as a result of Mr. Houchins' resignation.

(6) Option granted June 20, 2011 relating to an aggregate of 288,750 shares, of which 52,500 shares vesting immediately, with 59,062 shares scheduled to vest on the first anniversary of the grant date and the remainder vesting in 24 equal monthly installments thereafter; however, such additional vesting, relating to an aggregate of 236,250 shares, was forfeit as a result of Mr. Houchins' resignation. To the extent vested, this stock option will remain exercisable until its termination on April 13, 2012, the three-month anniversary of Mr. Houchins' resignation.

(7) Option granted June 20, 2011 and was scheduled to vest up to one-third annually at the discretion of the Board of Directors. This stock option was forfeited in its entirety upon Mr. Houchins' resignation.

(8) Option granted April 25, 2011 relating to an aggregate of 941,752 shares and vesting up to one-third in each calendar year, or a pro-rata portion thereof for a period less than a full year, at the discretion of the Board of Directors.

(9) Option granted April 25, 2011 relating to an aggregate of 1,412,627 shares, of which 25% vest on the first anniversary of the grant date and the remainder vest in 24 equal monthly installments thereafter.

(10) Option granted June 22, 2011 relating to an aggregate of 875,000 shares and vesting up to one-third in each calendar year, or a pro-rata portion thereof for a period less than a full year, at the discretion of the Board of Directors.

(11) Option granted June 22, 2011 relating to an aggregate of 875,000 shares, of which 25% vest on the first anniversary of the grant date and the remainder vest in 24 equal monthly installments thereafter.

Director Compensation

Pursuant to the non-employee director compensation plan adopted by our Board of Directors, our non-employee directors are 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 30,000 shares of the Company's common stock upon their initial appointment or election to the Board; and (3) an annual stock option grant of 10,000 shares of the Company's common stock. In addition, any non-employee director designated as chairman of the Board is entitled to an annual retainer of $10,000, the chair of the Board's audit committee is entitled to an additional annual retainer of $8,000, and the chairs of the Board's compensation and nominating & corporate governance committees are entitled to annual retainers of $4,000. In addition, Dr. Belldegrun receives 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.

The following table sets forth the compensation paid to our directors for their service in 2011.

Name	Fees earned or paid in cash	**Option Awards (1)**	Total
Arie S. Belldegrun, M.D.	$ 123,958	$ -	$123,958
William F. Hamilton, Ph.D.	$ 33,000	$ -	$33,300
Tomer Kariv	$ 25,000	$ -	$25,000
Glenn Mattes	$ -	$ -	$-

Yacov Reizman	$ 25,000	$ -	$25,000
Steven B. Ruchefsky	$ 25,000	$ -	$25,000
David M. Tanen	$ 25,000	$ -	$25,000

(1) No stock options were granted to our non-employee directors during 2011.

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 May 1, 2012 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)	1,360,025	3.7
Glenn Mattes (3)	907,287	2.5
Alexander Zukiwski (4)	372,974	1.0
David M. Tanen (5)	1,625,449	4.5
J. Chris Houchins (6)	-	-
William F. Hamilton, Ph.D. (7)	43,301	*
Tomer Kariv (8)	4,572,875	12.1
Yacov Reizman (9)	772,587	2.1
Steven B. Ruchefsky (10)	3,381,109	9.0
All current executive officers and directors as a group (10 persons)	13,385,173	32.2
Pontifax Ltd. (8)	4,572,875	12.1
UTA Capital LLC (11) 100 Executive Drive, Ste. 330 West Orange, NJ 07052	3,041,917	8.2
Commercial Street Capital, LLC (10) 800 Westchester Ave. Rye Brook, NY 10573	3,381,109	9.0
Clal Insurance Co. Ltd. (12) 48 Menachem Begin St. Tel-Aviv 66180, Israel	3,127,781	8.5
Wexford Capital LP (13) 411 West Putnam Ave. Greenwich, CT 06830	3,891,777	10.5
Peter M. Kash (14) 689 Fifth Ave., 12th Floor New York, NY 10022	1,990,606	5.5

* represents less than 1%.

(1) Based upon 36,304,942 issued and outstanding shares of our common stock as of May 1, 2012. Beneficial ownership is determined in accordance with Rule 13d-3 under the Securities 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.

(2) Beneficial ownership includes (i) 442,155 shares held in a trust of which Dr. Belldegrun is a beneficiary, including 125,000 shares issuable upon the exercise of warrants; (ii) 190,119 shares held in a family trust for which Dr. Belldegrun is a co-trustee, including 62,500 shares issuable upon the exercise of warrants; (iii) 190,119 shares held in a family limited partnership of which Dr. Belldegrun is a partner; and (iv) 512,710 shares issuable upon exercise of stock options.

(3) Includes 657,287 shares issuable upon the exercise of stock options.

(4) Represents shares issuable upon the exercise of stock options.

(5) Beneficial ownership includes 149,532 shares held by Mr. Tanen's minor children and 102,221 shares issuable upon the exercise of options and warrants held by Mr. Tanen.

(6) All stock options previously held by Mr. Houchins have been terminated as a result of his resignation as Arno's Chief Operating Officer, which resignation was effective as of January 13, 2012.

(7) Includes 33,333 shares issuable upon the exercise of stock options.

(8) Beneficial ownership includes (i) 10,000 shares issuable upon the exercise of stock options held by Mr. Kariv; and (ii) 4,562,875 shares held by affiliates of Pontifax Ltd., of which Mr. Kariv is chief executive officer, including 1,500,000 shares issuable upon the exercise of warrants.

(9) Beneficial ownership includes (i) 10,000 shares issuable upon the exercise of stock options held by Mr. Reizman; and (ii) 762,587 shares held by FCC Ltd., of which Mr. Reizman is chairman and chief executive officer, including 456,300 shares issuable upon the exercise of warrants.

(10) Beneficial ownership includes (i) 35,000 shares issuable upon the exercise of options and warrants held by Mr. Ruchefsky; and (ii) 3,346,109 shares held by Commercial Street Capital, LLC, of which Mr. Ruchefsky is president, including 1,100,000 shares issuable upon the exercise of warrants.

(11) Includes 1,000,000 shares issuable upon the exercise of warrants.

(12) Includes 550,000 shares issuable upon the exercise of warrants.

(13) Beneficial ownership includes (i) 527,613 shares of our common stock held by Kappa Investors, LLC (“Kappa”), including 108,737 shares issuable upon the exercise of warrants; and (ii) 3,364,164 shares of our common stock held by Wexford Spectrum Investors LLC, a Delaware limited liability company ("Wexford Spectrum"), including 535,995 shares issuable upon the exercise of warrants. Wexford Capital LP, a Delaware partnership (“Wexford Capital”), is a registered Investment Advisor and also serves as an investment advisor or sub-advisor to the members of Kappa and Wexford Spectrum. Wexford GP LLC (“Wexford GP”) is the general partner of Wexford Capital. Mr. Charles E. Davidson and Mr. Joseph M. Jacobs are each managing and controlling members of Wexford GP.

(14) Beneficial ownership includes 358,876 shares held by Mr. Kash’s minor children and 202,006 shares issuable upon the exercise of stock options and warrants held by Mr. Kash.

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, Mr. Kazam, 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, Kazam 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 664,880 shares of Series A Preferred Stock at an initial exercise price of $1.10 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, 2011 and 2010, and for the years then ended, and for the period from August 1, 2005 (inception) through December 31, 2011, 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 said 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.

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

INDEX TO FINANCIAL STATEMENTS

	Page
Report of Independent Registered Public Accounting Firm	F-2
Balance Sheets	F-3
Statements of Operations	F-4
Statement of Stockholders' Equity (Deficiency)	F-5
Statements of Cash Flows	F-6
Notes to Financial Statements	F-7

F-1

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, 2011 and 2010, and the related statements of operations and deficit accumulated during the development stage, stockholders' equity, and cash flows for the years then ended and for the period from August 1, 2005 (inception) through December 31, 2011. 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 Arno Therapeutics, Inc. (a development stage company) as of December 31, 2011 and 2010, 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, 2011, 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

March 30, 2012

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

BALANCE SHEETS

	December 31, 2011	December 31, 2010
ASSETS		
Current assets		
Cash and cash equivalents	$ 6,678,344	$ 13,528,444
Prepaid expenses and other current assets	296,948	247,500
Total current assets	6,975,292	13,775,944
Property and equipment, net	38,673	30,013
Restricted cash	-	44,018
Security deposit	10,455	-
Total assets	$ 7,024,420	$ 13,849,975
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 683,161	$ 554,362
Accrued expenses and other current liabilities	1,188,041	1,354,967
Due to related party	84,756	69,298
Deferred rent	7,351	14,748
Total current liabilities	1,963,309	1,993,375
Warrant liability	3,705,472	3,420,780
Total liabilities	5,668,781	5,414,155
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY		
Preferred stock, $0.0001 par value, 35,000,000 shares authorized, 0 and 15,274,000 shares issued and outstanding	-	1,527
Common stock, $0.0001 par value, 80,000,000 shares authorized, 36,304,942 and 20,412,024 shares issued and outstanding	3,605	2,041
Additional paid-in capital	36,865,034	36,036,139
Deficit accumulated during the development stage	(35,513,000)	(27,603,887)
Total stockholders' equity	1,355,639	8,435,820
Total liabilities and stockholders' equity	$ 7,024,420	$ 13,849,975

See accompanying notes to financial statements

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF OPERATIONS

	Year ended December 31,		Period from August 1, 2005 (inception) through December 31, 2011
	2011	2010	
Operating expenses:			
Research and development	$5,690,836	$4,139,554	$ 28,308,078
General and administrative	1,956,115	886,591	7,043,941
Total operating expenses	7,646,951	5,026,145	35,352,019
Loss from operations	(7,646,951)	(5,026,145)	(35,352,019)
Other income (expense):			
Interest income	28,771	19,339	406,271
Interest expense	-	-	(1,260,099)
Other (expense) income	(290,933)	983,780	692,847
Total other income (expense)	(262,162)	1,003,119	(160,981)
Net loss	$(7,909,113)	$(4,023,026)	$ (35,513,000)
Preferred stock dividends	$81,651	$237,423	
Net loss available to common stockholders	$(7,990,764)	$(4,260,449)	
Net loss per share - basic and diluted	$(0.23)	$(0.21)	
Weighted-average shares outstanding -basic and diluted	34,514,594	20,412,024	

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, 2011

	PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN	DEFICIT ACCUMULATED DURING THE DEVELOPMENT	TOTAL STOCKHOLDERS' EQUITY
	SHARES	AMOUNT	SHARES	AMOUNT	CAPITAL	STAGE	(DEFICIT)
Issuance of common shares to founders at $0.0001 per share	-	$ -	9,968,797	$ 997	$ 4,003	$ -	$ 5,000
Stock based compensation for services	-	-	-	-	9,700	-	9,700
Net loss, period from August 1, 2005 (inception) through December 31, 2006	-	-	-	-	-	(370,893)	(370,893)
Balance at December 31, 2006	-	-	9,968,797	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	-	-	9,968,797	997	102,003	(3,730,590)	(3,627,590)

Common stock sold in private placement, net of issuance costs of $141,646	-	-	7,360,689	736	17,689,301	-	17,690,037
Conversion of notes payable upon closing of private placement	-	-	1,962,338	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	-	-	1,100,200	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	-	-	20,392,024	2,039	24,504,525	(16,644,156)	7,862,408
Stock based compensation for services	-	-	-	-	647,448	-	647,448
	-	-	20,000	2	2,598	-	2,600

Stock option exercise							
Net loss, year ended December 31, 2009						(6,936,705)	(6,936,705)
Balance at December 31, 2009	-	-	20,412,024	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	15,274,000	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	15,274,000	1,527	20,412,024	2,041	36,036,139	(27,603,887)	8,435,820
Stock based compensation for services	-	-	-	-	707,284	-	707,284
Preferred stock conversion	(15,274,000)	(1,527)	15,274,000	1,527	-	-	-

Issuance of stock dividend in connection with conversion of preferred stock	-	-	319,074	32	(32)	-	-
Grant of restricted shares	-	-	250,000	-	115,168	-	115,168
Stock option exercise	-	-	49,844	5	6,475	-	6,480
Net loss, year ended December 31, 2011	-	-	-	-	-	(7,909,113)	(7,909,113)
Balance at December 31, 2011	-	$ -	36,304,942	$ 3,605	$ 36,865,034	$ (35,513,000)	$ 1,355,639

See accompanying notes to financial statements

ARNO THERAPEUTICS, INC.

(A DEVELOPMENT STAGE COMPANY)

STATEMENTS OF CASH FLOWS

	Year ended December 31,		Period from August 1, 2005 (inception) through December 31, 2011
	2011	2010	
Cash flows from operating activities			
Net loss	$(7,909,113)	$(4,023,026)	$ (35,513,000)
Adjustment to reconcile net loss to net cash used in operating activities			
Depreciation and amortization	11,677	11,554	101,144
Stock-based compensation	822,452	249,286	2,948,404
Warrant liability	284,692	80,359	365,051
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	(7,397)	(1,322)	7,351
Loss on disposal of assets	2,677	-	5,357
Noncash interest expense	-	-	311,518
Changes in operating assets and liabilities			
Prepaid expenses and other assets	(49,448)	(136,911)	(296,948)
Restricted cash	44,018	-	-
Security deposit	(10,455)	-	(10,455)
Accounts payable	128,799	(448,668)	683,161
Accrued expenses	(166,926)	798,763	1,188,041
Due to related party	15,458	(63,120)	84,756
Net cash used in operating activities	(6,833,566)	(3,533,085)	(28,736,704)
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	13,974,230
Proceeds from issuance of common stock in private placement, net	-	-	17,690,037
Deferred financing fees paid	-	-	(45,000)
Proceeds from issuance of notes payable	-	-	1,000,000
Repayment of notes payable	-	-	(1,000,000)
Proceeds from issuance of convertible notes payable	-	-	3,967,000
Proceeds from exercise of stock options	6,480	-	9,080
Net cash provided by financing activities	6,480	13,974,230	35,600,347
Net (decrease) increase in cash and cash equivalents	(6,850,100)	10,441,145	6,678,344
Cash and cash equivalents at beginning of period	13,528,444	3,087,299	-
Cash and cash equivalents at end of period	$6,678,344	$13,528,444	$ 6,678,344
Supplemental schedule of cash flows information:			
Cash paid for interest	$-	$-	$ 80,000
Supplemental schedule of non-cash investing and financing activities:			
Conversion of notes payable and interest to common stock	$-	$-	$ 4,278,518
Common shares of Laurier issued in reverse merger transaction	$-	$-	$ 110
Issuance of warrants in connection with private placement of convertible preferred units	$-	$3,340,421	$ 3,340,421
Preferred stock dividends paid in connection with conversion	$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, 2011 and 2010 and the period

from August 1, 2005 (inception) to December 31, 2011

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 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 identify patients who express activated progesterone and would therefore be more likely to benefit from treatment with onapristone. The Company plans to conduct pre-clinical toxicology studies and manufacturing activities and to file an investigational new drug application ("IND") 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 hematological malignancies.

- ***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.

- ***AR-67*** – AR-67 is a novel, third-generation camptothecin analogue that inhibits Topoisomerase I activity with enhanced stability in the lactone form. AR-67 is currently being studied in a Phase II clinical study in subjects with glioblastoma multiforme, or GBM, a highly aggressive form of brain cancer. Due to the low response rate among patients in the study, the Company has determined not to proceed with further development of AR-67 beyond the ongoing Phase II study and instead plans to focus its available resources on its other programs, particularly

onapristone and AR-42.

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, 2011, 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 $35.5 million at December 31, 2011. 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, 2011 were approximately $6.7 million, compared to $13.5 million as of December 31, 2010. Based on its resources at December 31, 2011 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 2012. 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 1.99377 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 1,611,760 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 19,291,824 shares of Laurier common stock. Immediately prior to the effective time of the Merger, 1,100,200 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 3,691,900 shares of Old Arno Common Stock to selected accredited investors, which shares were exchanged for approximately 7,360,700 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 984,246 shares of Old Arno's common stock and the holders of the Notes received warrants to purchase an aggregate of 98,409 shares of Old Arno common stock at an exercise price equal to $4.83 per share. The shares issued upon conversion were exchanged for an aggregate of approximately 1,962,338 shares of the Company's Common Stock and the warrants were exchanged for five-year warrants to purchase an aggregate of approximately 196,189 shares of the Company's Common Stock at an exercise price equal to $2.42 per share. See "Note 8. Convertible 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, 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) Restricted Cash

In October 2008, the Company entered into a non-cancelable five year office lease agreement. In connection with the lease, the Company delivered an irrevocable stand-by and unconditional letter of credit in the amount of approximately $44,000 (or the approximate equivalent of three months' rent) with the landlord as the beneficiary as a security deposit in case of default or failure to comply with the lease requirements. In order to fund the letter of credit, the Company deposited a compensating balance of approximately $44,000 into an interest bearing certificate of deposit with a financial institution. The Company terminated this lease agreement effective as of December 31, 2011.

(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) Warrant Liability

The Company accounts for the warrants issued in connection with the September 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,					
	2011			2010		
	Loss (Numerator)	Shares (Denominator)	Per Share Amount	Loss (Numerator)	Shares (Denominator)	Per Share Amount
Net loss	$(7,909,113)			$(4,023,026)		
Less: Preferred stock dividends	(81,651)			(237,423)		
Basic and Diluted EPS						
Loss available to common stockholders	$(7,990,764)	34,514,594	$ (0.23)	$(4,260,449)	20,412,024	$ (0.21)

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:

	December 31, 2011	December 31, 2010
Options to purchase common stock	–	129,532

For the year ended December 31, 2011 and 2010, 15,817,737 and 24,333,650 shares of Convertible Preferred Stock, warrants and options 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, 2011 and 2010, 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 2011 and 2010 respectively. In addition, the Company had no amounts accrued for interest and penalties as of December 31, 2011 and 2010, 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. Management does not expect this new guidance to 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, 2011 and 2010 consist of the following:

	2011	2010
Computer equipment and software	$17,721	$8,537
Office furniture and equipment	52,242	46,861
Leasehold improvements	8,449	7,206
Total property and equipment	78,412	62,604
Accumulated depreciation	(39,739)	(32,591)

Total property and equipment, net	$38,673	$30,013

Depreciation expense for the years ended December 31, 2011, 2010, and the period from August 1, 2005 (inception) through December 31, 2011, were $11,677, $11,554 and $56,143, 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 not anticipated until 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. 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 Phase I clinical trial. 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 may be required to make milestone payments of up to approximately $0.2 million under these license agreements during 2012, depending on the outcome of certain ongoing development activities.

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 does not anticipate making any milestone payments 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. See Note 16. Subsequent Events.

7. ACCRUED LIABILITIES

Accrued liabilities as of December 31, 2011 and 2010 consist of the following:

	2011	2010
Accrued compensation and related benefits	$272,342	$103,217
Accrued research and development expense	915,699	868,000
Accrued other expense	–	383,750
Total accrued liabilities	$1,188,041	$1,354,967

8. CONVERTIBLE NOTES PAYABLE

During February 2007, the Company completed a private placement offering of two-year 6% convertible promissory notes (the "Notes") for an aggregate principal amount of $3,967,000. The aggregate principal amount and accrued but unpaid interest on the Notes, which totaled $4,278,518, automatically converted upon the closing of the Company's June 2008 private placement into 1,962,338 shares of common stock at a conversion price of $2.42, which was equal to 90% of the per share price of the shares sold in the financing. Due to the beneficial conversion feature resulting from the discounted conversion price, a discount of $475,391 was recorded as interest expense with a corresponding credit to additional paid-in capital. In addition, in conjunction with the conversion of the convertible debt, the Company issued fully vested warrants to purchase 196,189 shares of common stock to the holders of the Notes. The warrants were valued at $348,000 using the Black-Scholes option-pricing model and the following assumptions: exercise price $2.42, a 3.41% risk-free interest rate, a five year contractual term, a dividend rate of 0%, and 94.30% expected volatility. The cost of the warrants was included in interest expense in the accompanying Statements of

Operations, and as an increase in additional paid-in capital.

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, 2011.

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 December 31, 2011:

	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	$ 3,705,472	$ -	$ -	$ 3,705,472

The fair value of the warrant liability relating to the Class A and Class B warrants issued in conjunction with the September 2010 Series A Convertible Preferred Stock financing (See Note 10(c), below) 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 the warrant liability 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, 2011:

Fair Value Measurements Using Significant Unobservable Inputs (Level 3)	
	Warrant Liability
Balance at January 1, 2011	$ (3,420,780)
Purchases, sales and settlements:	
Warrants issued	–
Total gains or losses:	
Unrealized appreciation	(284,692)
Balance at December 31, 2011	$ (3,705,472)

10. STOCKHOLDERS' EQUITY

(a) Common Stock

On April 25, 2011, the Company issued 250,000 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 vest in 12 equal monthly installments and have a total fair value of $172,750, or $0.69 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 $115,168 of compensation expense for the year ended December 31, 2011 in connection with the restricted shares.

On February 9, 2011, the Company issued an aggregate of 15,274,000 shares of its common stock upon the automatic conversion of all 15,274,000 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," below. In addition, the Company elected to satisfy accrued dividends on the Series A Convertible Preferred Stock of $319,074 by issuing an additional 319,074 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, 2011, the Company has 36,304,942 shares of common stock issued and outstanding and an additional 15,817,737 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 "Purchase Agreement"), with a number of institutional and other accredited investors pursuant to which the Company sold in a private placement an aggregate of 15,274,000 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 Purchase Agreement, the Company also issued two-and-one-half-year Class A warrants to purchase an aggregate of 1,221,920 shares of Series A Preferred Stock at an initial exercise price of $1.00 per share and five-year Class B warrants to purchase an aggregate of 6,415,080 shares of Series A Preferred Stock at an initial exercise price of $1.15 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.

Along with the holders of common stock, the holders of Series A Preferred Stock were entitled to one vote on all matters submitted to the holders of common stock for each share of common stock into which the Series A Preferred Stock would be converted as of the record date for such vote based on the conversion ratio then in effect. In addition, the holders of the Series A Preferred Stock were entitled to vote as a separate class with respect to any change in the rights of the Series A Preferred Stock, any amendment to the Company's certificate of incorporation, any increase in the number of shares of Series A Preferred Stock, or the authorization, creation or issuance of any class or series of capital stock ranking senior to or of equal seniority with the Series A Preferred Stock.

The holders of Series A Preferred Stock were entitled to an annual per share cumulative dividend equal to 5% of the original issuance price of $1.00 per share, which dividends were payable upon the conversion of the Series A Preferred Stock into common stock, and which the Company could elect to pay in the form of additional shares of common stock in lieu of cash. The holders of Series A Preferred Stock were entitled to payment of all accrued dividends prior to the payment of any dividends to the holders of common stock. As of December 31, 2010, the amount for the preferred stock dividend was $237,423. Following payment of such accrued dividends, the holders of Series A Preferred Stock were entitled to participate with the holders of common stock in any other dividend payment on an as-converted basis.

Upon the liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, the holders of Series A Preferred Stock were entitled to be paid, prior to any payments to the holders of common stock, an amount per share equal to the sum of (i) 1.5 times the original issuance price of $1.00 per share, plus (ii) any accrued but unpaid dividends on the Series A Preferred 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 1,056,930 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 15,274,000 shares of Series A Convertible Preferred Stock converted into 15,274,000 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 319,074 shares.

(c) Warrants

In accordance with the Purchase Agreement, the Company issued two-and-one-half-year Class A warrants to purchase an aggregate of 1,221,920 shares of Series A Preferred Stock at an initial exercise price of $1.00 per share and five-year Class B warrants to purchase an aggregate of 6,415,080 shares of Series A Preferred Stock at an initial exercise price of $1.15 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 $3.8 million and approximately $3.4 million at December 31, 2011 and 2010, 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.

Significant assumptions used at December 31, 2011 for the warrants included a weighted average term of 4 years, volatility of 120% and a risk-free interest rate of 0.83%.

Below is a table that summarizes all outstanding warrants to purchase shares of the Company's common stock as of December 31, 2011.

Grant Date	Warrants Issued	Exercise Price	Weighted Average Exercise Price	Expiration Date	Exercised	Warrants Outstanding
01/02/2008	299,063	$ 2.42	$ 2.42	01/02/2013	-	299,063
06/02/2008	196,189	$ 2.42	$ 2.42	06/02/2013	-	196,189
09/03/2010	1,221,920	$ 1.00	$ 1.00	03/03/2013	-	1,221,920
09/03/2010	6,415,080	$ 1.15	$ 1.15	09/03/2015	-	6,415,080
09/03/2010	1,056,930	$ 1.10	$ 1.10	09/03/2015	-	1,056,930
	9,189,182		$ 1.19			9,189,182

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 2,990,655 shares of the Company's common stock reserved for issuance under the Plan. On April 25, 2011, the Company's Board of Directors approved an amendment to the Plan to increase the number of shares of common stock issuable thereunder to 7,000,000 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, 2011, an aggregate of 51,601 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.

For the years ended December 31, 2011 and 2010, 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 years ended December 31, 2011 and 2010:

	2011		2010	
Expected Volatility	87	%	73-87	%
Expected Term	5-10 years		5-10 years	
Dividend yield	0.0	%	0.0	%
Risk-free interest rate	1.5-2.0	%	1.0-1.6	%
Stock price	$0.69 - $0.72		$0.53 - $1.00	
Forfeiture rate	0.0	%	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, 2011, and information with respect to the changes in options outstanding is as follows:

		Options Outstanding		
	Shares Available for Grant	Outstanding Stock Options	Weighted-Average Exercise Price	Aggregate Intrinsic Value
Balance at January 1, 2010	1,057,414	1,913,241	$ 1.71	
Options granted under the Plan	(440,000)	440,000	$ 1.00	
Options exercised	-	-	$ -	
Options forfeited	459,938	(459,938)	$ 2.72	
Balance at January 1, 2011	1,077,352	1,893,303	$ 1.36	
Shares authorized for issuance	4,009,345	-	-	
Options granted under the Plan	(5,054,317)	5,054,317	$ 1.03	
Restricted stock granted under the Plan	(250,000)	-	-	
Options exercised	-	(49,844)	$ -	
Options forfeited	269,221	(269,221)	$ 1.53	
Balance at December 31, 2011	51,601	6,628,555	$ 1.09	$ -
Exercisable at December 31, 2011		1,991,804	$ 1.31	$ -

The following table summarizes information about stock options outstanding at December 31, 2011:

Outstanding Shares	Exercisable Shares

Exercise Price		Weighted-Average Remaining Contractual Life (Years)	Weighted-Average Exercise Price		Weighted-Average Exercise Price
$ 1.00	6,237,822	8.8	$ 1.00	1,601,071	$ 1.00
$ 2.42	299,066	4.2	$ 2.42	299,066	$ 2.42
$ 3.00	91,667	2.3	$ 3.00	91,667	$ 3.00
Total	6,628,555	8.6	$ 1.09	1,991,804	$ 1.31

Stock-based compensation costs for the years ended December 31, 2011 and 2010 and for the cumulative period from August 1, 2005 (inception) through December 31, 2011, are as follows:

	Year Ended December 31,		Period from August 1, 2005 (inception) through
	2011	2010	December 31, 2011
General and administrative	$ 449,652	$ 118,383	$ 1,544,627
Research and development	372,800	130,903	1,403,777
Total	$ 822,452	$ 249,286	$ 2,948,404

The fair value of options vested under the 2005 Plan was approximately $276,985 and $304,468 for the years ended December 31, 2011 and 2010, respectively, and approximately $2,188,342 for the period from August 1, 2005 (inception) through December 31, 2011.

At December 31, 2011, total unrecognized estimated compensation cost related to stock options granted prior to that date was approximately $2,375,630 which is expected to be recognized over a weighted-average vesting period of 2.5 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, 2011, the Company issued options to purchase a total of 5,054,317 shares of common stock to employees and consultants with exercise prices ranging from $1.00 to $2.42 and terms of up to 10 years. Of this total, 10-year options to purchase 2,354,379 shares at an exercise price of $1.00 were issued to the Company's new President and Chief Executive Officer and 10-year options to purchase 1,750,000 shares at an exercise price of $1.00 were issued to the Company's new Chief Medical Officer. For the year ended December 31, 2010, the Company issued options to purchase a total of 440,000 shares of common stock to members of the Company's Board of Directors, all with exercise prices of $1.00 and 10-year terms.

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 second through fourth quarters of 2011, TRC billed Arno $287,145 for services rendered, an average of approximately $31,900 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, 2011 and 2010 and for the period from August 1, 2005 (inception) through December 31, 2011, total cash services and reimbursed expenses totaled $655,923, $765,424 and $1,803,765, respectively. As of December 31, 2011 the Company had a payable to TRC of $84,756, which was paid in full during the first two months of 2012.

Prior to June 1, 2009, some of the Company's expenses were paid by Two River Group Holdings, LLC ("Two River"), a company owned by three of the Company's directors and founders. No interest is charged by Two River on any outstanding balance owed by the Company. For the years ended December 31, 2011 and 2010 and for the period from August 1, 2005 (inception) through December 31, 2011 reimbursable expenses totaled $0, $0 and $206,039, respectively. The Company also granted fully vested warrants to purchase 299,063 shares of its common stock at an exercise price of $2.42 to the Two River employees who provided consultation and due diligence efforts related to the in-licensing of AR-12 and AR-42. The warrants have a five year life and are valued at $480,400 based upon the Black-Scholes option-pricing model. As of December 31, 2011 the Company has no balance payable to Two River.

The Company utilized the services of Riverbank Capital Securities, Inc. ("Riverbank"), a FINRA member broker dealer registered with the SEC, for investment banking and other investment advisory services in connection with the June 2008 private placement and the Notes. Riverbank is an entity controlled by several partners of Two River who are also officers and/or directors of the Company. The Company paid a $100,000 non-accountable expense allowance to Riverbank for services related to the June 2008 private placement and is not obligated to Riverbank for any future payments.

In connection with the September 2010 private placement, the Company engaged Riverbank to serve as placement agent. In consideration for its services, the Company paid Riverbank a placement fee of $789,880. In addition, the Company issued to designees of Riverbank five-year warrants to purchase an aggregate of 664,880 shares of Series A Preferred Stock at an initial exercise price of $1.10 per share. The warrants issued to Riverbank are in substantially the same form as the Class A and Class B Warrants issued to the investors in the private placement, except that they do not include certain anti-dilution provisions contained in the Class A and Class B Warrants.

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, 2011 and 2010 and for the cumulative period from August 1, 2005 (inception) through December 31, 2011, 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 2007 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 2011, 2010 and the period from August 1, 2005 (inception) through December 31, 2011 and as of December 31, 2011 and 2010, had no amounts accrued for interest and penalties.

At December 31, 2011, 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, 2011 and 2010 are shown below.

	For Years Ended December 31,	
	2011	2010
Non-current deferred tax assets		
Research tax credit	$ 1,631,000	$ 1,484,000
Net operating loss carry forwards	11,720,000	8,996,000
Stock based compensation	848,000	767,000
Total deferred tax assets	14,199,000	11,247,000
Non-current deferred tax liability		
Depreciation and amortization	(10,000)	(8,000)
Total net deferred tax assets	14,189,000	11,239,000
Valuation allowance	(14,189,000)	(11,239,000)
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, 2011 and 2010 the Company recorded valuation allowances of $14.2 million and $11.2 million, respectively, representing a change in the valuation allowance of $3.0 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, 2011 and 2010 are as follows:

	2011		2010	
	Amount	Rate	Amount	Rate
Federal tax	$(2,689,000)	34.0 %	$(1,368,000)	34.0 %
State tax	(390,000)	5.9 %	(237,000)	5.9 %
R&D Credit	(15,000)	7.7 %	(308,000)	7.7 %
Valuation allowance	3,446,000	(47.6)%	1,913,000	(47.6)%
Net	$-	-	$-	-

There was no income tax benefit recorded for the years ended December 31, 2011 and 2010.

On January 20, 2010, the Company received net proceeds of $322,016 through the sale of its New Jersey net operating losses (“NOLS”). In June 2009, the Company submitted an application with the New Jersey Economic Development Authority (“NJEDA”) to sell its 2008 NOLS in return for cash consideration to the Company. The NJEDA in conjunction with the State of New Jersey offers financing and business incentives to New Jersey-based biotechnology and technology companies. As a result of the sale of the NOLS sale, the Company’s New Jersey deferred tax asset carryforward is reduced by $4,000,000 beginning in 2010. The Company’s federal net operating losses were not affected by the sale of the NOLS, and thus has the full value of the 2009 deferred tax asset carryforward.

On October 29, 2010, the Company was awarded funding of a total of approximately $733,000 under the IRS Qualifying Therapeutic Discovery Project (“QTDP”) program, which was created as part of the Patient Protection and Affordable Care Act of 2010 (the “Healthcare Reform Act”). As enacted under the Healthcare Reform Act, the QTDP program provides a tax credit or grant of up to 50% of eligible costs and expenses for the tax years of 2009 and 2010 for qualifying research and development expenses incurred for innovative projects that are determined by the U.S. Department of Health and Human Services to have reasonable potential to result in a new therapy, reduce health care costs, or represent a significant advance in finding a cure for human disease. The Company was awarded approximately $244,000 for R&D expenses incurred for each of its AR-12, AR-42 and AR-67 development programs. The Company received the total award amount of $733,438 during November 2010.

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, 2011 are approximately $277,311, 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 $7,351 in rent expense for the Flemington Lease for the year ended December 31, 2011.

Future minimum lease payments under operating leases as of December 31, 2011 are as follows:

2012	$59,708
2013	69,981
2014	71,816
2015	8,734
Total future minimum lease payments	$210,239

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, 250,000 shares of restricted common stock. These shares vest in 12 equal monthly installments and have a total fair value of $172,750, or $0.69 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 $115,168 of compensation expense for the year ended December 31, 2011 in connection with the restricted shares.

In addition, Mr. Mattes was granted 10-year options to purchase a total of 2,354,379 shares of the Company's common stock at an exercise price equal to $1.00 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, 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 20, 2012, 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 1,750,000 shares of the Company's common stock at an exercise price equal to $1.00 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, 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, 2011 is approximately $1.9 million, all expected to be due during 2012.

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, 2011. The Company does not anticipate recognizing any significant losses relating to these arrangements.

16. SUBSEQUENT EVENTS

On January 4, 2012, J. Chris Houchins, the Chief Operating Officer of the Company resigned his employment with the Company, effective as of January 13, 2012. As a result of Mr. Houchins' resignation, 539,167 stock options were forfeited.

On February 13, 2012 (the "Effective Date"), the Company, entered into a license agreement (the "License Agreement") with Invivis Pharmaceuticals, Inc. ("Invivis"), pursuant to which the Company was granted an exclusive, worldwide (except as noted below), royalty-bearing license for the rights to commercialize technologies embodied by a certain patent application and know-how relating to onapristone, an anti-progestin hormone blocker, for all therapeutic uses. Also on February 13, 2012, the Company entered into a services agreement (the "Services Agreement") with Invivis, pursuant to which Invivis will provide the Company with certain support services relating to the development of onapristone in exchange for a monthly cash payment.

Under the terms of the License Agreement, the Company is required to make a one-time cash payment of $500,000 to Invivis within 30 days of the Effective Date. The License Agreement also requires the Company to make performance-based cash payments to Invivis of up to an aggregate of $15.1 million upon successful completion of clinical and regulatory milestones relating to onapristone (including regulatory approval in the United States, the EU and Japan) and to pay Invivis a royalty on net sales of onapristone at a rate in the low-single digits. Pursuant to a separate services agreement, the Company will also pay Invivis a monthly fee for two years for certain clinical development support services, which includes the assignment of up to two full-time employees to perform such services.

Pursuant to the License Agreement, Invivis retains all rights related to the commercialization of onapristone in France, subject to the Company's right to engage in the clinical development of onapristone and obtain marketing approval of the drug in France. In the event the Company successfully obtains marketing approval of onapristone in France, Invivis shall have the option, within 90 days of such approval, to transfer to the Company all rights related to the commercialization of onapristone in France in exchange for a one-time cash payment.

The License Agreement provides that the Company will indemnify and hold Invivis and its affiliates harmless from any and all claims arising out of or in connection with (i) the death of or injury to any person or any damage to property; (ii) the production, manufacture, sale, use, lease, consumption or advertisement of onapristone; or (iii) any obligation of the Company under the License Agreement, except for (x) claims that the licensed patent rights infringe third party intellectual property; and (y) claims arising out of the gross negligence or willful misconduct of Invivis, breach of warranty by Invivis, or certain other breaches of the License Agreement by Invivis. The License Agreement will terminate upon the later of (i) the expiration of the last patent relating to onapristone, and (ii) February 13, 2032. Invivis may terminate the License Agreement 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 License Agreement for any reason upon 90 days' prior written notice.

On January 12, 2012, the Company received a notice from Pitt, from which the Company licensed its rights to AR-67, indicating that the Company was in default under its license agreement 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 parties agreed to terminate the license agreement. The Company is currently working with Pitt to wind down its AR-67 program, and intends to fulfill its ongoing obligations in connection with the completion of the Phase II GBM study.

26,753,061 Shares

Common Stock

PROSPECTUS

May 14, 2012