Cactus Ventures, Inc.
Form S-1
March 15, 2013

As filed with the Securities and Exchange Commission on March 15, 2013

Registration No. _____

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

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

CACTUS VENTURES, INC.
(Exact name of registrant as specified in its charter)

Nevada	2834	000-52446
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

501 Fifth Avenue, 3rd Floor
New York, NY 10017
(212) 300-2131
(Address, including zip code, and telephone number,
including area code, of registrant's principal executive offices)

Action Stock Transfer Corporation
2469 E. Fort Union Blvd., Suite 214
Salt Lake City, UT 84121
(801) 274-1088
(Name, address, including zip code, and telephone number,
including area code, of agent for service)

Copies to:

Richard I. Anslow, Esq.
Anslow & Jaclin LLP
195 Route 9 South, Suite 204
Manalapan, New Jersey 07726
Tel No.: (732) 409-1212
Fax No.: (732) 577-1188

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933 check the following box: þ

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b2 of the Exchange Act.

Large accelerated filer	¨	Accelerated filer	¨
Non-accelerated filer	¨	Smaller reporting company	þ

(Do not check if a smaller reporting company)

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CALCULATION OF REGISTRATION FEE

Title of Each Class Of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price per share (2)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common stock, $0.01 par value per share	3,118,939	$ 1.65(2)	$ 5,146,250	$ 701.95
Common stock, $0.01 par value per share	11,163,013	$ 0.78(2)	$ 8,707,151	$ 1,187.66
Common stock, $0.01 par value per share, issuable upon exercise of the Series A warrants	3,118,939	$ 1.65(3)	$ 5,146,250	$ 701.95
Common stock, $0.01 par value per share, issuable upon exercise of the Series B warrants	1,559,437	$ 2.48(3)	$ 3,867,404	$ 527.51
Common stock, $0.01 par value per share, issuable upon exercise of the Stock Offering warrants	2,700,971	$ 0.78(3)	$ 2,106,758	$ 287.36
Common stock, $0.01 par value per share, issuable upon exercise of consulting firm warrants	3,755,562	$ 0.01(3)	$ 37,556	$ 5.12
Common stock, $0.01 par value per share, issuable upon exercise of placement agent warrants	1,245,210	$ 0.78(3)	$ 971,264	$ 132.48
Common stock, $0.01 par value per share, issuable upon exercise of placement agent warrants	467,845	$ 1.65(3)	$ 771,945	$ 105.29
Total	27,129,916			$ 3,649.32

(1) This registration statement includes an indeterminate number of additional shares of common stock issuable for no additional consideration pursuant to any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration, which results in an increase in the number of outstanding shares of our common stock. In the event of a stock split, stock dividend or similar transaction involving our common stock, in order to prevent dilution, the number of shares registered shall be automatically increased to cover the additional shares in accordance with Rule 416(a) under the Securities Act of 1933, as amended.

(2) Calculated based upon the sales price of the common stock held by the selling stockholders named in this Registration Statement.

(3) Calculated based upon the exercise price of the warrants held by the selling stockholders named in this Registration Statement.

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

Section 8(a), may determine.

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The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION DATED MARCH 15, 2013

27,129,916 Shares of Common Stock

CACTUS VENTURES, INC.

This prospectus covers the sale by the selling stockholders of up to (i) 14,281,952 shares of common stock, par value $0.01 per share, held by the selling stockholders, (ii) 3,118,968 shares of our common stock issuable upon exercise of Series A warrants held by the selling stockholders at an exercise price of $1.65 per share, (iii) 1,559,437 shares of our common stock issuable upon exercise of Series B warrants held by the selling stockholders at an exercise price of $2.48 per share, (iv) 2,700,971 shares of our common stock issuable upon exercise of the 2011 stock offering (the "Stock Offering") warrants held by the selling stockholders at an exercise price of $0.78 per share, (v) 3,755,562 shares of our common stock issuable upon exercise of consulting firm warrants held by the selling stockholders at an exercise price of $0.01 per share, (vi) 1,245,210 shares of our common stock issuable upon exercise of placement agent warrants held by the selling stockholders at an exercise price of $0.78 per share, (vii) 467,845 shares of our common stock issuable upon exercise of placement agent warrants held by the selling stockholders at an exercise price of $1.65 per share. The shares being sold by the selling stockholders were issued to them in private placement transactions which were exempt from the registration and prospectus delivery requirements of the Securities Act of 1933, as amended (the "Securities Act"). Our common stock and warrants are more fully described in "Description of Securities."

These shares will be offered for sale by the selling shareholders in accordance with the "Plan of Distribution." We will not receive any proceeds from sales of shares of our common stock or warrants by the selling stockholders. However, to the extent the warrants are exercised for cash, if at all, we will receive the exercise price of the warrants. We will pay the expenses incurred in connection with the offering described in this prospectus, with the exception of brokerage expenses, fees, discounts and commissions, which will be paid by selling stockholders.

Our common stock is presently traded on the OTCBB and OTCQB under the symbol CTVN. On March 12, 2013, the last sale price of our shares as reported by the OTCBB was $1.50 per share. The prices at which the selling stockholders may sell the shares of common stock that are part of this offering may be market prices prevailing at the time of sale, at negotiated prices, at fixed prices, or at varying prices determined at the time of sale. See "Plan of Distribution."

We are an "emerging growth company" under the federal securities laws and will be subject to reduced public company reporting requirements. An investment in our common stock may be considered speculative and involves a high degree of risk, including the risk of a substantial loss of your investment. See "Risk Factors" beginning on page 6 to read about the risks you should consider before buying shares of our common stock.

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

The date of this prospectus is _____, 2013

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Please read this prospectus carefully. It describes our business, our financial condition and results of operations. We have prepared this prospectus so that you will have the information necessary to make an informed investment decision.

You should rely only on information contained in this prospectus. We have not authorized any other person to provide you with different information. This prospectus is not an offer to sell, nor is it seeking an offer to buy, these securities in any state where the offer or sale is not permitted. The information in this prospectus is complete and accurate as of the date on the front cover, but the information may have changed since that date.

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PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all the information that you should consider before investing in the common stock. You should carefully read the entire prospectus, including "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements, before making an investment decision. Our actual results may differ significantly from the results discussed in these forward-looking statements as a result of certain factors, including those described in "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements." All references to "we," "us," "our," and the "company" mean Cactus Ventures, Inc. and its subsidiary Actinium Pharmaceuticals, Inc.

Business Overview

We are a biopharmaceutical company focused on the $50 billion market for cancer drugs. Our most advanced products are Actimab™-A, an antibody-drug construct containing actinium 225 (Ac-225), currently in human clinical trials for acute myeloid leukemia (AML) and Iomab™-B, an antibody-drug construct containing iodine 131 (I-131), used in myeloconditioning for hematopoietic stem cells transplantation (HSCT) in various indications. The Company is currently designing a trial which the Company intends to submit for registration approval in HSCT in the settings of refractory and relapsed acute myeloid leukemia in older patients. The Company is developing its cancer drugs using its expertise in radioimmunotherapy. In addition, the Ac-225 based drugs development relies on the patented Alpha Particle Immunotherapy Technology (APIT) platform technology co-developed with Memorial Sloan- Kettering Cancer Center, a related institution. The APIT technology couples monoclonal antibodies (mAb) with extremely potent but comparatively safe alpha particle emitting radioactive isotopes, in particular actinium 225 and bismuth 213. The final drug construct is designed to specifically target and kill cancer cells while minimizing side effects. The Company intends to develop a number of products for different types of cancer and derive revenue from partnering relationships with large pharmaceutical companies and/or direct sales of its products in specialty markets in the U.S.

Corporate Information

Our principal executive offices are located at 501 Fifth Avenue, 3rd Floor, New York, NY 10017 and our telephone number is (212) 300-2131. Our website address is www.actiniumpharmaceuticals.com. The information contained therein or connected thereto shall not be deemed to be incorporated into this prospectus or the registration statement of which it forms a part. The information on our website is not part of this prospectus.

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THE OFFERING

Common stock offered by selling stockholders	27,129,916 shares of our common stock including: up to (i) 14,281,952 shares of common stock, par value $0.01 per share, held by the selling stockholders, (ii) 3,118,968 shares of our common stock issuable upon exercise of Series A warrants held by the selling stockholders at an exercise price of $1.65 per share, (iii) 1,559,437 shares of our common stock issuable upon exercise of Series B warrants held by the selling stockholders at an exercise price of $2.48 per share, (iv) 2,700,971 shares of our common stock issuable upon exercise of the Stock Offering warrants held by the selling stockholders at an exercise price of $0.78 per share, (v) 3,755,562 shares of our common stock issuable upon exercise of consulting firm warrants held by the selling stockholders at an exercise price of $0.01 per share, (vi) 1,245,210 shares of our common stock issuable upon exercise of placement agent warrants held by the selling stockholders at an exercise price of $0.78 per share, (vii) 467,845 shares of our common stock issuable upon exercise of placement agent warrants held by the selling stockholders at an exercise price of $1.65 per share.
Common stock outstanding before the offering	21,385,573 shares of common stock (1)
Common stock outstanding after the offering	34,233,566 shares of common stock (2)
Use of proceeds	We will not receive any proceeds from the sale of the common stock by the selling stockholders. However, we may receive up to approximately $14,811,084 in the aggregate upon the exercise of the warrants if the holders exercise them for cash. The registration of common stock pursuant to this prospectus does not necessarily mean that any of those shares will ultimately be offered or sold by the selling stockholders. We intend to use the proceeds received from any cash exercise of the warrants for working capital and general corporate purposes.
Trading Symbol	CTVN
Risk Factors	The common stock offered hereby involves a high degree of risk and should not be purchased by investors who cannot afford the loss of their entire investment. See “Risk Factors”.

(1) Based upon the total number of issued and outstanding shares as of March 12, 2013 (assuming a 100% share exchange by Actinium Pharmaceuticals, Inc. (“Actinium”) shareholders). As of March 12, 2013, we had exchanged 55.5% of the issued and outstanding capital stock of Actinium from the Actinium shareholders.

(2) Based upon the total number of issued and outstanding shares as of March 12, 2013, and including (i) 3,118,968 shares of our common stock issuable upon exercise of Series A warrants held by the selling stockholders at an exercise price of $1.65 per share, (ii) 1,559,437 shares of our common stock issuable upon exercise of Series B warrants held by the selling stockholders at an exercise price of $2.48 per

share, (iii) 2,700,971 shares of our common stock issuable upon exercise of the Stock Offering warrants held by the selling stockholders at an exercise price of $0.78 per share, (iv) 3,755,562 shares of our common stock issuable upon exercise of consulting firm warrants held by the selling stockholders at an exercise price of $0.01 per share, (v) 1,245,210 shares of our common stock issuable upon exercise of placement agent warrants held by the selling stockholders at an exercise price of $0.78 per share, (vi) 467,845 shares of our common stock issuable upon exercise of placement agent warrants held by the selling stockholders at an exercise price of $1.65 per share.

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RISK FACTORS

An investment in our common stock involves a high degree of risk. You should carefully consider the risks described below, together with all of the other information included in this Registration Statement, before making an investment decision. If any of the following risks actually occurs, our business, financial condition or results of operations could suffer. In that case, the trading price of our shares of common stock could decline and you may lose all or part of your investment. See “Cautionary Note Regarding Forward Looking Statements” above for a discussion of forward-looking statements and the significance of such statements in the context of this Registration Statement.

Risks Related to Our Business

We have generated no revenue from commercial sales to date and our future profitability is uncertain.

We have a limited operating history and our business is subject to all of the risks inherent in the establishment of a new business enterprise. Our likelihood of success must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with this development and expansion. Since we began our business, we have focused on research, development and clinical trials of product candidates, and have incurred losses since inception. As of December 31, 2012, we had a deficit accumulated during development stage of approximately $55,743,463. If we continue to incur operating losses and fail to become a profitable company, we may be unable to continue our operations. We expect to continue to operate at a net loss as we continue our research and development efforts, continue to conduct clinical trials and develop manufacturing, sales, marketing and distribution capabilities. There can be no assurance that the products under development by us will be approved for sale in the U.S. or elsewhere. Furthermore, there can be no assurance that if such products are approved they will be successfully commercialized, and the extent of our future losses and the timing of our profitability are highly uncertain.

If we fail to obtain the capital necessary to fund our operations, we will be unable to continue or complete our product development and you will likely lose your entire investment.

We do not currently have sufficient capital for the development and commercialization of our lead product and we will need to continue to seek capital from time to time to continue development of our lead drug candidates and to acquire and develop other product candidates. Our first product is not expected to be commercialized until at least 2016 and we do not expect that the partnering revenues it will generate will be sufficient to fund our ongoing operations.

Our business or operations may change in a manner that would consume available funds more rapidly than anticipated and substantial additional funding may be required to maintain operations, fund expansion, develop new or enhanced products, acquire complementary products, business or technologies or otherwise respond to competitive pressures and opportunities, such as a change in the regulatory environment or a change in preferred cancer treatment modalities. However, we may not be able to secure funding when we need it or on favorable terms.

If we cannot raise adequate funds to satisfy our capital requirements, we will have to delay, scale-back or eliminate our research and development activities, clinical studies or future operations. We may also be required to obtain funds through arrangements with collaborators, which arrangements may require us to relinquish rights to certain technologies or products that we otherwise would not consider relinquishing, including rights to future product candidates or certain major geographic markets. We may further have to license our technology to others. This could result in sharing revenues which we might otherwise have retained for ourselves. Any of these actions may harm our business, financial condition and results of operations.

The amount of capital we may need depends on many factors, including the progress, timing and scope of our product development programs; the progress, timing and scope of our preclinical studies and clinical trials; the time and cost necessary to obtain regulatory approvals; the time and cost necessary to further develop manufacturing processes and arrange for contract manufacturing; our ability to enter into and maintain collaborative, licensing and other commercial relationships; and our partners' commitment of time and resources to the development and commercialization of our products.

We have limited access to the capital markets and even if we can raise additional funding, we may be required to do so on terms that are dilutive to you.

We have limited access to the capital markets to raise capital. The capital markets have been unpredictable in the recent past for radio-immunotherapy and other oncology companies and unprofitable companies such as ours. In addition, it is generally difficult for development stage companies to raise capital under current market conditions. The amount of capital that a company such as ours is able to raise often depends on variables that are beyond our control. As a result, we may not be able to secure financing on terms attractive to us, or at all. If we are able to consummate a financing arrangement, the amount raised may not be sufficient to meet our future needs. If adequate funds are not available on acceptable terms, or at all, our business, including our technology licenses, results of operations, financial condition and our continued viability will be materially adversely affected.

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If we fail to obtain or maintain necessary U.S. Food and Drug Administration clearances for our radio-immunotherapy products, or if such clearances are delayed, we will be unable to commercially distribute and market our products.

Our products are subject to rigorous regulation by the U.S Food and Drug Administration (FDA) and numerous other federal, state and foreign governmental authorities. The process of seeking regulatory clearance or approval to market a radio-immunotherapy product is expensive and time-consuming and, notwithstanding the effort and expense incurred, clearance or approval is never guaranteed. If we are not successful in obtaining timely clearance or approval of API products from the FDA, we may never be able to generate significant revenue and may be forced to cease operations. In particular, the FDA permits commercial distribution of a new radio-immunotherapy product only after the product has received approval of a Biologics License Application ("BLA") filed with the U.S. Food and Drug Administration pursuant to 21 C.F.R. § 314, seeking permission to market the product in interstate commerce in the United States. The BLA process is costly, lengthy and uncertain. Any BLA application filed by the Company will have to be supported by extensive data, including, but not limited to, technical, preclinical, clinical trial, manufacturing and labeling data, to demonstrate to the FDA's satisfaction the safety and efficacy of the product for its intended use.

Obtaining clearances or approvals from the FDA and from the regulatory agencies in other countries could result in unexpected and significant costs for us and consume management's time and other resources. The FDA and other agencies could ask us to supplement our submissions, collect non-clinical data, conduct additional clinical trials or engage in other time-consuming actions, or it could simply deny our applications. In addition, even if we obtain a BLA approval or pre-market approvals in other countries, the approval could be revoked or other restrictions imposed if post-market data demonstrates safety issues or lack of effectiveness. We cannot predict with certainty how, or when, the FDA will act. If we are unable to obtain the necessary regulatory approvals, our financial condition and cash flow may be materially adversely affected, and our ability to grow domestically and internationally may be limited. Additionally, even if cleared or approved, the Company's products may not be approved for the specific indications that are most necessary or desirable for successful commercialization or profitability.

Our radio-immunotherapy product candidates are in the early stages of development; and we have not demonstrated that any of our products actually cure cancer.

Only two product candidates of the Company are currently in clinical development by the Company. There is an ongoing Phase I AML trial at MSKCC under physician IND with a single dose of Actimab™-A. The Company has also commenced a Phase I/II multi-center AML trial with fractionated doses of Actimab™-A. Additionally, there are a number of physician IND trials that have been conducted or are currently ongoing at FHCRC with single doses of Iomab™-B. Neither the Company nor any relevant collaborative partner(s) has yet undertaken any clinical assessment or investigation of Company radio-immunotherapy product candidates for other indications, including colon cancer or prostate cancer. Significant further investment may be required to acquire antibody rights and to undertake necessary research and continued development. Further laboratory and specific clinical testing will be required prior to regulatory approval of any product candidates. Adverse or inconclusive results from pre-clinical testing or clinical trials of product candidates may substantially delay, or halt entirely, any further development of one or more of our products. The projected timetables for continued development of the technologies and related product candidates by us may otherwise be subject to delay or suspension.

Modifications to our product candidates may require new NDA approvals.

Once a particular Company product candidate receives FDA approval or clearance, expanded uses or uses in new indications of our products may require additional human clinical trials and new regulatory approvals or clearances, including additional IND and NDA submissions and premarket approvals before we can begin clinical development, and/or prior to marketing and sales. If the FDA requires new clearances or approvals for a particular use or indication,

we may be required to conduct additional clinical studies, which would require additional expenditures and harm our operating results. If the products are already being used for these new indications, we may also be subject to significant enforcement actions.

Conducting clinical trials and obtaining clearances and approvals can be a time-consuming process, and delays in obtaining required future clearances or approvals could adversely affect our ability to introduce new or enhanced products in a timely manner, which in turn would harm our future growth.

There is no guarantee that the FDA will grant NDA approval of our future product candidates and failure to obtain necessary clearances or approvals for our future product candidates would adversely affect our ability to grow our business.

We have recently commenced a multi-center Phase I/II clinical trial for our lead drug candidate, Actimab™-A, in AML and in the future expect to submit a NDA to the FDA for approval of this product. This drug candidate is also the subject of an ongoing human safety trial being conducted under a physician IND at Memorial Sloan Kettering Cancer Center in New York City. We are in the early stages of evaluating other drug candidates consisting of conjugates of Ac-225 with human or humanized antibodies for pre-clinical and clinical development in other types of cancer and the Company has recently acquired rights to Iomab™, a Phase II clinical stage monoclonal antibody with safety and efficacy data in more than 250 patients in need of HSCT. Product candidates utilizing this antibody would also require FDA approval of a NDA. The FDA may not approve or clear these products for the indications that are necessary or desirable for successful commercialization. Indeed, the FDA may refuse our requests for NDA market approval of new products, new intended uses or indications to existing or future product candidates. Failure to receive approval for our new products would have an adverse effect on our ability to expand our business.

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Clinical trials necessary to support NDA approval of our future product candidates will be time consuming and expensive. Delays or failures in our clinical trials will prevent us from commercializing our product candidates and will adversely affect our business, operating results and prospects and could cause us to cease operations.

Initiating and completing clinical trials necessary to support NDA approval of Actimab™-A and other product candidates, will be time-consuming and expensive and the outcome uncertain. Moreover, the results of early clinical trials are not necessarily predictive of future results, and any product candidate we advance into clinical trials may not have favorable results in later clinical trials. We have worked with the FDA to develop a clinical trial designed to support initial safety and efficacy of Actimab™-A and on October 6, 2008, and January 5, 2009, we submitted IND amendments to the FDA for the conduct of a multi-center Phase I/II clinical trial for treatment of AML. The trial is now underway with the purpose of examining the use of Actimab-A in AML patients who are not eligible for approved forms of treatment with curative intent. The trial is not designed to support final NDA approval of the product candidate and one or more additional trials will have to be conducted in the future before we file a NDA. In addition, there can be no assurance that the data generated during the trial will meet our chosen safety and effectiveness endpoints or otherwise produce results that will eventually support the filing or approval of a BLA.

The issued patents, which are licensed by the Company for the HuM-195 antibody, our acute myeloid leukemia targeting antibody, will begin to expire before we have commercialized Actimab™-A.

The humanized antibody which we use in the conjugated Actimab™-A product candidate is covered by the claims of issued patents that we license from Facet Biotech Corporation, a wholly-owned subsidiary of Abbott Laboratories (“Facet”). Some of those patents will begin to expire in 2013. After these patents expire, others may be eventually able to use an antibody with the same sequence in alpha particle drug products based on alpha particle emitters other than actinium 225 and bismuth 213. Any process that would enable such a competition as described above is likely to require several years of development before achieving our product candidate’s current status and may be subject to significant regulatory hurdles, but is nevertheless a possibility that can affect the Company’s business in the future.

Additionally, because we expect that certain of these patents will expire prior to commercialization of Actimab™-A, the Company expects that in order to attract a commercialization partner for that product candidate, it will may need to reach an agreement with Facet to reduce the milestone payments and royalties currently required to be paid under our license agreement for HuM-195. There can be no assurance that the parties will be able to agree on an amendment to the terms of the license. Failure to reach such an agreement could materially adversely affect the Company’s ability to find a commercialization partner for Actimab™-A which may materially harm our business.

The BC8 antibody utilized in Iomab™-B is not patent protected.

The antibody we use in the conjugated Iomab™ product candidate is not covered by the claims of any issued or pending patents. Accordingly, others may be eventually able to use an antibody with the same sequence in alpha particle drug products based on alpha particle emitters. Any process that would enable such a competition as described above is likely to require several years of development before achieving our product candidate’s current status and may be subject to significant regulatory hurdles, but is nevertheless a possibility that could negatively impact the Company’s business in the future.

We may be unable to obtain a sufficient supply of Ac-225 medical grade isotope in order to continue clinical trials and to allow for the manufacture of commercial quantities of Actimab-A

There are limited quantities of Ac-225 available today. The existing supplier of Ac-225 to the Company is Oak Ridge National Laboratory (ORNL). It manufactures Ac-225 by eluting it from its supply of Thorium-229. Although this has proven to be a very reliable source of production for a number of years, it is limited by the quantity of

Thorium-229 at ORNL. We believe that the current approximate maximum of Ac-225 production from this source is sufficient for approximately 1,000 - 2,000 patient treatments per year. Since our needs are significantly below that amount at this time, and will continue to be below that for as long as we do not have a commercial product with a potential of selling more than 2,000 patient doses per year, we believe that this supply will be sufficient for completion of clinical trials and early commercialization. To secure supplies beyond this amount, the Company has developed what it believes to be a scalable cost-effective process for manufacturing Ac-225 in a cyclotron at an estimated cost in excess of $5 million. This work has been conducted at Technical University Munich (TUM) in Germany. The Company is now in possession of detailed descriptions of all the developed manufacturing procedures and has rights to all relevant patent applications and other intellectual property. However, we do not currently have access to a commercial cyclotron capable of producing medical grade Ac-225. Although beam time on such cyclotrons is commercially available, the Company does not currently have a relationship with any entity that owns or controls a suitable cyclotron. It has identified possible sources and estimates that it could secure the necessary beam time when needed at a cost of approximately $2 million per year. The Company's contract for supply of this isotope from ORNL extends through the end of 2012, is renewable for future years, and has already been renewed for several consecutive years. However, there can be no assurance that ORNL will decide to renew the contract or that the U.S. Department of Energy will not change its policies that allow for the sale of isotope to the Company. Failure to acquire sufficient quantities of medical grade Ac-225 would make it impossible to effectively complete clinical trials and to commercialize Actimab™-A and would materially harm our business.

Conducting successful clinical studies may require the enrollment of large numbers of patients, and suitable patients may be difficult to identify and recruit.

Patient enrollment in clinical trials and completion of patient participation and follow-up depends on many factors, including the size of the patient population; the nature of the trial protocol; the attractiveness of, or the discomforts and risks associated with, the treatments received by enrolled subjects; the availability of appropriate clinical trial investigators; support staff; and proximity of patients to clinical sites and ability to comply with the eligibility and exclusion criteria for participation in the clinical trial and patient compliance. For example, patients may be discouraged from enrolling in our clinical trials if the trial protocol requires them to undergo extensive post-treatment procedures or follow-up to assess the safety and effectiveness of our product candidates or if they determine that the treatments received under the trial protocols are not attractive or involve unacceptable risks or discomforts. Patients may also not participate in our clinical trials if they choose to participate in contemporaneous clinical trials of competitive product candidates. In addition, patients participating in refractory AML clinical trials are seriously and often terminally ill and therefore may not complete the clinical trial due to reasons including comorbid conditions or occurrence of adverse medical events related or unrelated to the investigational products, or death.

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Development of sufficient and appropriate clinical protocols to demonstrate safety and efficacy are required and we may not adequately develop such protocols to support clearance and approval.

The FDA may require us to submit data on a greater number of patients than we originally anticipated and/or for a longer follow-up period or change the data collection requirements or data analysis applicable to our clinical trials. They may also require additional data on certain categories of patients, should it emerge during the conduct of our clinical trials that certain categories of patients are likely to be affected in different and/or additional manner than most of the patients. In addition to FDA requirements, our clinical trial requires the approval of the institutional review board, or IRB, at each site selected for participation in our current Actimab™-A clinical trial. We have submitted our clinical trial to the IRBs at participating sites for approval and we have thus far obtained approval from two IRBs, and are engaged in discussions with investigators at other sites to in order to complete the approval process with their respective hospital centers. The Company's clinical trial protocols have not been rejected by any IRB.

Additional delays to the completion of clinical studies may result from modifications being made to the protocol during the clinical trial, if such modifications are warranted and/or required by the occurrences in the given trial.

Each such modification has to be submitted to the FDA. This could result in the delay or halt of a clinical trial while the modification is evaluated. In addition, depending on the quantity and nature of the changes made, FDA could take the position that some or all of the data generated by the clinical trial is not usable because the same protocol was not used throughout the trial. This might require the enrollment of additional subjects, which could result in the extension of the clinical trial and the FDA delaying clearance or approval of a product candidate.

There can be no assurance that the data generated using modified protocols will be acceptable to FDA.

There can be no assurance that the data generated using modified protocols will be acceptable to FDA or that if future modifications during the trial are necessary, that any such modifications will be acceptable to FDA. If the FDA believes that its prior approval is required for a particular modification, it can delay or halt a clinical trial while it evaluates additional information regarding the change.

Serious injury or death resulting from a failure of one of our drug candidates during current or future clinical trials could also result in the FDA delaying our clinical trials or denying or delaying clearance or approval of a product.

The ongoing Phase I clinical trial for Actimab™-A conducted at MSKCC was designed to establish the maximum tolerated dose of the product. As the Company expected, patients receiving highest dose of the drug administered in the trial so far had prolonged bone marrow suppression which could lead to fatal infections and other severe consequences. Consequently, the dose levels of our drug in that trial were reduced as we continue our work on establishing maximum tolerated dose.

Even though an adverse event may not be the result of the failure of our drug candidate, FDA or an IRB could delay or halt a clinical trial for an indefinite period of time while an adverse event is reviewed, and likely would do so in the event of multiple such events.

Any delay or termination of our current or future clinical trials as a result of the risks summarized above, including delays in obtaining or maintaining required approvals from IRBs, delays in patient enrollment, the failure of patients to continue to participate in a clinical trial, and delays or termination of clinical trials as a result of protocol modifications or adverse events during the trials, may cause an increase in costs and delays in the filing of any submissions with the FDA, delay the approval and commercialization of our product candidates or result in the failure of the clinical trial, which could adversely affect our business, operating results and prospects. Lengthy delays in the completion of our Actimab™-A clinical trials would adversely affect our business and prospects and could cause us to

cease operations.

If the third parties on which we rely to conduct our clinical trials and to assist us with pre-clinical development do not perform as contractually required or expected, we may not be able to obtain regulatory approval for or commercialize our product candidates.

We do not have the ability to independently conduct our pre-clinical and clinical trials for our product candidates and we must rely on third parties, such as contract research organizations, medical institutions, clinical investigators and contract laboratories to conduct such trials. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if these third parties need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our pre-clinical development activities or clinical trials may be extended, delayed, suspended or terminated, and we may not be able to obtain regulatory approval for, or successfully commercialize, our product candidates on a timely basis, if at all, and our business, operating results and prospects may be adversely affected. Furthermore, our third-party clinical trial investigators may be delayed in conducting our clinical trials for reasons outside of their control.

The future results of our current or future clinical trials may not support our product candidate claims or may result in the discovery of unexpected adverse side effects.

Even if our clinical trials are completed as planned, we cannot be certain that their results will support our product candidate claims or that the FDA or foreign authorities will agree with our conclusions regarding them. Success in pre-clinical studies and early clinical trials does not ensure that later clinical trials will be successful, and we cannot be sure that the later trials will replicate the results of prior trials and pre-clinical studies. The clinical trial process may fail to demonstrate that our product candidates are safe and effective for the proposed indicated uses. If FDA concludes that the clinical trials for Actimab™-A, or any other product candidate for which we might seek clearance, have failed to demonstrate safety and effectiveness, we would not receive FDA clearance to market that product candidate in the United States for the indications sought. In addition, such an outcome could cause us to abandon the product candidate and might delay development of others. Any delay or termination of our clinical trials will delay the filing of any submissions with the FDA and, ultimately, our ability to commercialize our product candidates and generate revenues. It is also possible that patients enrolled in clinical trials will experience adverse side effects that are not currently part of a product candidate’s profile. In addition, our clinical trials for Actimab™-A involve a relatively small patient population. Because of the small sample size, their results may not be indicative of future results.

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Actimab™-A and future product candidates may never achieve market acceptance.

Actimab™-A and future product candidates that we may develop may never gain market acceptance among physicians, patients and the medical community. The degree of market acceptance of any of product will depend on a number of factors, including the actual and perceived effectiveness and reliability of the product; the results of any long−term clinical trials relating to use of the product; the availability, relative cost and perceived advantages and disadvantages of alternative technologies; the degree to which treatments using the product are approved for reimbursement by public and private insurers; the strength of our marketing and distribution infrastructure; and the level of education and awareness among physicians and hospitals concerning the product.

Failure of Actimab™-A or any of our other product candidates to significantly penetrate current or new markets would negatively impact our business, financial condition and results of operations.

To be commercially successful, physicians must be persuaded that using our product candidates for treatment of AML and other cancers are effective alternatives to existing therapies and treatments.

We believe that oncologists and other physicians will not widely adopt a product candidate unless they determine, based on experience, clinical data, and published peer-reviewed journal articles, that the use of that product candidate provides an effective alternative to other means of treating specific cancers. Patient studies or clinical experience may indicate that treatment with our product candidates does not provide patients with sufficient benefits in extension of life or quality of life. We believe that recommendations and support for the use of each product candidate from influential physicians will be essential for widespread market acceptance. Our product candidates are still in the development stage and it is premature to attempt to gain support from physicians at this time. We can provide no assurance that such support will ever be obtained. If our product candidates do not receive such support from these physicians and from long-term data, physicians may not use or continue to use, and hospitals may not purchase or continue to purchase, them.

Even if our product candidates are approved by regulatory authorities, if we or our suppliers fail to comply with ongoing FDA regulation or if we experience unanticipated problems with our products, these products could be subject to restrictions or withdrawal from the market.

Any product candidate for which we obtain FDA clearance or approval, and the manufacturing processes, reporting requirements, post-approval clinical data and promotional activities for such product candidate, will be subject to continued regulatory review, oversight and periodic inspections by the FDA. In particular, we and our suppliers are required to comply with FDA's Quality System Regulations, or QSR, and International Standards Organization, or ISO, regulations for the manufacture of products and other regulations which cover the methods and documentation of the design, testing, production, control, quality assurance, labeling, packaging, storage and shipping of any product candidate for which we obtain clearance or approval. Additionally, because our product candidates include radio-active isotopes, they will be subject to additional regulation and oversight from the United States Nuclear Regulatory Commission (NRC) and similar bodies in other jurisdictions. Regulatory bodies, such as the FDA, enforce these regulations through periodic inspections. The failure by us or one of our suppliers to comply with applicable statutes and regulations administered by the FDA and other regulatory bodies, or the failure to timely and adequately respond to any adverse inspectional observations or safety issues, could result in, among other things, enforcement actions by the FDA and/or other regulatory bodies.

If any of these actions were to occur, it would harm our reputation and cause our future product sales and profitability to suffer and may prevent us from generating revenue. Furthermore, our key component suppliers may not currently be or may not continue to be in compliance with all applicable regulatory requirements which could result in our failure to produce our product candidates on a timely basis and in the required quantities, if at all.

Even if regulatory clearance or approval of a product candidate is granted, such clearance or approval may be subject to limitations on the intended uses for which a product may be marketed and reduce the potential to successfully commercialize that product and generate revenue from that product. If the FDA determines that the product promotional materials, labeling, training or other marketing or educational activities constitute promotion of an unapproved use, it could request that we or our commercialization partners cease or modify our training or promotional materials or subject us to regulatory enforcement actions. It is also possible that other federal, state or foreign enforcement authorities might take action if they consider such training or other promotional materials to constitute promotion of an unapproved use, which could result in significant fines or penalties under other statutory authorities, such as laws prohibiting false claims for reimbursement.

In addition, we may be required to conduct costly post-market testing and surveillance to monitor the safety or effectiveness of our products, and we must comply with adverse event and pharmacovigilance reporting requirements, including the reporting of adverse events which occur in connection with, and whether or not directly related to, our products. Later discovery of previously unknown problems with our products, including unanticipated adverse events or adverse events of unanticipated severity or frequency, manufacturing problems, or failure to comply with regulatory requirements, may result in changes to labeling, restrictions on such products or manufacturing processes, withdrawal of the products from the market, voluntary or mandatory recalls, a requirement to recall, replace or refund the cost of any product we manufacture or distribute, fines, suspension of regulatory approvals, product seizures, injunctions or the imposition of civil or criminal penalties which would adversely affect our business, operating results and prospects.

Our revenue stream will depend upon third party reimbursement.

The commercial success of our product candidates in both domestic and international markets will be substantially dependent on whether third-party coverage and reimbursement is available for patients that use our products. However, the availability of insurance coverage and reimbursement for newly approved cancer therapies is uncertain, and therefore, third-party coverage may be particularly difficult to obtain even if our products are approved by the FDA as safe and efficacious. Patients using existing approved therapies are generally reimbursed all or part of the product cost by Medicare or other third-party payors. Medicare, Medicaid, health maintenance organizations and other third-party payors are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement of new drugs, and, as a result, they may not cover or provide adequate payment for these products. Submission of applications for reimbursement approval generally does not occur prior to the filing of an NDA for that product and may not be granted until many months after NDA approval. In order to obtain reimbursement arrangements for these products, we or our commercialization partners may have to agree to a net sales price lower than the net sales price we might charge in other sales channels. The continuing efforts of government and third-party payors to contain or reduce the costs of healthcare may limit our revenue. Initial dependence on the commercial success of our products may make our revenues particularly susceptible to any cost containment or reduction efforts.

Our Business as a “Going Concern”

In expressing an opinion on our financial statements, our auditor has expressed its opinion as to our business being a “going concern”. Such an opinion indicates that the business lacks sufficient liquidity to remain operating as a business entity for the next 12 months. Our ability to continue operations is dependent on the successful execution of our plans, which include the expectation of raising debt or equity based capital, with some additional funding from other traditional financing sources, including term notes, until such time that funds provided by operations are sufficient to fund working capital requirements. We may need to issue additional equity and incur additional liabilities with related parties to sustain our existence although no commitments for funding have been made and no assurance can be made that such commitments will be available.

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We are dependent on third parties for manufacturing and marketing of our proposed proprietary products. If we are not able to secure favorable arrangements with such third parties, our business and financial condition would be harmed.

We will not manufacture any of our proposed proprietary products for commercial sale nor do we have the resources necessary to do so. In addition, we currently do not have the capability to market drug products ourselves. We intend to contract with specialized manufacturing companies to manufacture our proposed proprietary products and partner with larger pharmaceutical companies for their commercialization. In connection with our efforts to commercialize our proposed proprietary products, we will seek to secure favorable arrangements with third parties to distribute, promote, market and sell them. If we are not able to secure favorable commercial terms or arrangements with third parties for distribution, marketing, promotion and sales of our proposed proprietary products, we may have to retain promotional and marketing rights and seek to develop the commercial resources necessary to promote or co-promote or co-market certain or all of our proprietary product candidates to the appropriate channels of distribution in order to reach the specific medical market that we are targeting. We may not be able to enter into any partnering arrangements on this or any other basis. If we are not able to secure favorable partnering arrangements, or are unable to develop the appropriate resources necessary for the commercialization of our proposed proprietary products, our business and financial condition could be harmed. In addition, we will have to hire additional employees or consultants, since our current employees have limited experience in these areas. Sufficient employees with relevant skills may not be available to us. Any increase in the number of our employees would increase our expense level, and could have an adverse effect on our financial position.

In addition, we, or our potential commercial partners, may not successfully introduce our proposed proprietary products or they may not achieve acceptance by patients, health care providers and insurance companies. Further, it is possible that we may not be able to secure arrangements to manufacture, market, distribute, promote and sell our proposed proprietary products at favorable commercial terms that would permit us to make a profit. To the extent that corporate partners conduct clinical trials, we may not be able to control the design and conduct of these clinical trials.

We may have conflicts with our partners that could delay or prevent the development or commercialization of our product candidates.

We may have conflicts with our partners, such as conflicts concerning the interpretation of preclinical or clinical data, the achievement of milestones, the interpretation of contractual obligations, payments for services, development obligations or the ownership of intellectual property developed during our collaboration. If any conflicts arise with any of our partners, such partner may act in a manner that is adverse to our best interests. Any such disagreement could result in one or more of the following, each of which could delay or prevent the development or commercialization of our product candidates, and in turn prevent us from generating revenues: unwillingness on the part of a partner to pay us milestone payments or royalties we believe are due under a collaboration; uncertainty regarding ownership of intellectual property rights arising from our collaborative activities, which could prevent us from entering into additional collaborations; unwillingness by the partner to cooperate in the development or manufacture of the product, including providing us with product data or materials; unwillingness on the part of a partner to keep us informed regarding the progress of its development and commercialization activities or to permit public disclosure of the results of those activities; initiating litigation or alternative dispute resolution options by either party to resolve the dispute; or attempts by either party to terminate the agreement.

Upon commercialization of our product candidates, we may be dependent on third parties to market, distribute and sell them.

Our ability to receive revenues may be dependent upon the sales and marketing efforts of any future co-marketing partners and third-party distributors. At this time, we have not entered into an agreement with any commercialization

partner and only plan to do so after the successful completion of Phase II clinical trials and prior to commercialization. If we fail to reach an agreement with any commercialization partner, or if upon reaching such an agreement that partner fails to sell a large volume of our products, it may have a negative impact on our business, financial condition and results of operations.

Our product candidates will face significant competition in the markets for them, and if they are unable to compete successfully, our business will suffer.

Our product candidates face, and will continue to face, intense competition from large pharmaceutical companies, as well as academic and research institutions. We compete in an industry that is characterized by (i) rapid technological change, (ii) evolving industry standards, (iii) emerging competition and (iv) new product introductions. Our competitors have existing products and technologies that will compete with our product candidates and technologies and may develop and commercialize additional products and technologies that will compete with our product candidates and technologies. Because several competing companies and institutions have greater financial resources than us, they may be able to (i) provide broader services and product lines, (ii) make greater investments in research and development, or R&D, and (iii) carry on broader R&D initiatives. Our competitors also have greater development capabilities than we do and have substantially greater experience in undertaking preclinical and clinical testing of product candidates, obtaining regulatory approvals, and manufacturing and marketing pharmaceutical products. They also have greater name recognition and better access to customers than us. Our chief competitors include companies such as Bayer Schering Pharma AG, GlaxoSmithKline Plc, Spectrum Pharmaceuticals, Inc. and Algeta ASA.

Adverse events involving our products may lead the FDA to delay or deny clearance for our product candidates or result in product recalls that could harm our reputation, business and financial results.

Once a product candidate receives FDA clearance or approval, the agency has the authority to require the recall of commercialized products in the event of adverse side effects, material deficiencies or defects in design or manufacture. The authority to require a recall must be based on an FDA finding that there is a reasonable probability that the device would cause serious injury or death. Manufacturers may, under their own initiative, recall a product if any material deficiency in a product is found. A government-mandated or voluntary recall by us or one of our distributors could occur as a result of adverse side effects, impurities or other product contamination, manufacturing errors, design or labeling defects or other deficiencies and issues. Recalls of any of our products would divert managerial and financial resources and have an adverse effect on our financial condition and results of operations. The FDA requires that certain classifications of recalls be reported to FDA within 10 working days after the recall is initiated. Companies are required to maintain certain records of recalls, even if they are not reportable to the FDA. We may initiate voluntary recalls involving our products in the future that we determine do not require notification of the FDA. If the FDA disagrees with our determinations, they could require us to report those actions as recalls. A future recall announcement could harm our reputation with customers and negatively affect our sales. In addition, the FDA could take enforcement action for failing to report the recalls when they were conducted.

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Our business depends upon securing and protecting critical intellectual property.

Our commercial success will depend in part on our obtaining and maintaining patent, trade secret, copyright and trademark protection of our technologies in the United States and other jurisdictions, as well as successfully enforcing this intellectual property and defending this intellectual property against third-party challenges. We will only be able to protect our technologies from unauthorized use by third parties to the extent that valid and enforceable intellectual property protection, such as patents or trade secrets law, cover them. In particular, we place considerable emphasis on obtaining patent and trade secret protection for significant new technologies, products and processes. Furthermore, the degree of future protection of our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. Moreover, the degree of future protection of our proprietary rights is uncertain for product candidates that are currently in the early stages of development because we cannot predict which of these product candidates will ultimately reach the commercial market or whether the commercial versions of these product candidates will incorporate proprietary technologies.

Our patent position is highly uncertain and involves complex legal and factual questions.

Accordingly, we cannot predict the breadth of claims that may be allowed or enforced under our patents or in third-party patents. For example, we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications and issued patents; we or our licensors might not have been the first to file patent applications for these inventions; others may independently develop similar or alternative technologies or duplicate any of our technologies; it is possible that none of our pending patent applications or the pending patent applications of our licensors will result in issued patents; our issued patents and issued patents of our licensors may not provide a basis for commercially viable technologies, or may not provide us with any competitive advantages, or may be challenged and invalidated by third parties; and, we may not develop additional proprietary technologies that are patentable.

As a result, our owned and licensed patents may not be valid and we may not be able to obtain and enforce patents and to maintain trade secret protection for the full commercial extent of our technology. The extent to which we are unable to do so could materially harm our business.

We or our licensors have applied for and will continue to apply for patents for certain products. Such applications may not result in the issuance of any patents, and any patents now held or that may be issued may not provide us with adequate protection from competition. Furthermore, it is possible that patents issued or licensed to us may be challenged successfully. In that event, if we have a preferred competitive position because of such patents, such preferred position would be lost. If we are unable to secure or to continue to maintain a preferred position, we could become subject to competition from the sale of generic products. Failure to receive, inability to protect, or expiration of our patents for medical use, manufacture, conjugation and labeling of Ac-225, the antibodies that we license from third parties, or subsequent related filings, would adversely affect our business and operations.

Patents issued or licensed to us may be infringed by the products or processes of others. The cost of enforcing our patent rights against infringers, if such enforcement is required, could be significant, and the Company does not currently have the financial resources to fund such litigation. Further, such litigation can go on for years and the time demands could interfere with our normal operations. There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the pharmaceutical industry. We may become a party to patent litigation and other proceedings. The cost to us of any patent litigation, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the costs of such litigation more effectively than we can because of their substantially greater financial resources. Litigation may also absorb significant management time.

Unpatented trade secrets, improvements, confidential know-how and continuing technological innovation are important to our scientific and commercial success. Although we attempt to and will continue to attempt to protect our proprietary information through reliance on trade secret laws and the use of confidentiality agreements with our partners, collaborators, employees and consultants and other appropriate means, these measures may not effectively prevent disclosure of our proprietary information, and, in any event, others may develop independently, or obtain access to, the same or similar information.

Certain of our patent rights are licensed to us by third parties. If we fail to comply with the terms of these license agreements, our rights to those patents may be terminated, and we will be unable to conduct our business.

If we are found to be infringing on patents or trade secrets owned by others, we may be forced to cease or alter our product development efforts, obtain a license to continue the development or sale of our products, and/or pay damages.

Our manufacturing processes and potential products may violate proprietary rights of patents that have been or may be granted to competitors, universities or others, or the trade secrets of those persons and entities. As the pharmaceutical industry expands and more patents are issued, the risk increases that our processes and potential products may give rise to claims that they infringe the patents or trade secrets of others. These other persons could bring legal actions against us claiming damages and seeking to enjoin clinical testing, manufacturing and marketing of the affected product or process. If any of these actions are successful, in addition to any potential liability for damages, we could be required to obtain a license in order to continue to conduct clinical tests, manufacture or market the affected product or use the affected process. Required licenses may not be available on acceptable terms, if at all, and the results of litigation are uncertain. If we become involved in litigation or other proceedings, it could consume a substantial portion of our financial resources and the efforts of our personnel.

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Our ability to protect and enforce our patents does not guaranty that we will secure the right to commercialize our patents.

A patent is a limited monopoly right conferred upon an inventor, and his successors in title, in return for the making and disclosing of a new and non-obvious invention. This monopoly is of limited duration but, while in force, allows the patent holder to prevent others from making and/or using its invention. While a patent gives the holder this right to exclude others, it is not a license to commercialize the invention where other permissions may be required for commercialization to occur. For example, a drug cannot be marketed without the appropriate authorization from the FDA, regardless of the existence of a patent covering the product. Further, the invention, even if patented itself, cannot be commercialized if it infringes the valid patent rights of another party.

We rely on confidentiality agreements to protect our trade secrets. If these agreements are breached by our employees or other parties, our trade secrets may become known to our competitors.

We rely on trade secrets that we seek to protect through confidentiality agreements with our employees and other parties. If these agreements are breached, our competitors may obtain and use our trade secrets to gain a competitive advantage over us. We may not have any remedies against our competitors and any remedies that may be available to us may not be adequate to protect our business or compensate us for the damaging disclosure. In addition, we may have to expend resources to protect our interests from possible infringement by others.

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We may undertake international operations, which will subject us to risks inherent with operations outside of the United States.

Although we do not have any foreign operations at this time, we intend to seek market clearances in foreign markets that we believe will generate significant opportunities. However, even with the cooperating of a commercialization partner, conducting drug development in foreign countries involves inherent risks, including, but not limited to difficulties in staffing, funding and managing foreign operations; unexpected changes in regulatory requirements; export restrictions; tariffs and other trade barriers; difficulties in protecting, acquiring, enforcing and litigating intellectual property rights; fluctuations in currency exchange rates; and potentially adverse tax consequences.

If we were to experience any of the difficulties listed above, or any other difficulties, any international development activities and our overall financial condition may suffer and cause us to reduce or discontinue our international development and registration efforts.

We may not be successful in hiring and retaining key employees.

Our future operations and successes depend in large part upon the continued service of key members of our senior management team whom we are highly dependent upon to manage our business, in particular, Dr. Dragan Cicic, our Chief Operating Officer and Chief Medical Officer. If any member of our current senior management terminates his or her employment with us, such a departure may have a material adverse effect on our business.

Our future success also depends on our ability to identify, attract, hire or engage, retain and motivate other well-qualified managerial, technical, clinical and regulatory personnel. There can be no assurance that such professionals will be available in the market, or that we will be able to retain existing professionals or meet or continue to meet their compensation requirements. Furthermore, the cost base in relation to such compensation, which may include equity compensation, may increase significantly, which could have a material adverse effect on us. Failure to establish and maintain an effective management team and work force could adversely affect our ability to operate, grow and manage our business.

We do not yet know what the consequences may be on our business of the Patient Protection and Affordable Care Act.

In March 2010, President Obama signed the Patient Protection and Affordable Care Act ("PPACA"), which makes changes that are expected to significantly impact the pharmaceutical industries. One of the principal aims of the PPACA as currently enacted is to expand health insurance coverage to approximately 32 million Americans who are currently uninsured. The consequences of this significant coverage expansion on the sales of our products, once they are developed, are unknown and speculative at this point.

The PPACA contains a number of provisions designed to generate the revenues necessary to fund the coverage expansions among other things. This includes new fees or taxes on certain health-related industries.

The PPACA provisions on comparative clinical effectiveness research extend the initiatives of the American Recovery and Reinvestment Act of 2009, also known as the stimulus package, which included $1.1 billion in funding to study the comparative effectiveness of health care treatments and strategies. This stimulus funding was designated for, among other things, conducting, supporting or synthesizing research that compares and evaluates the risks and benefits, clinical outcomes, effectiveness and appropriateness of products. The PPACA appropriates additional funding to comparative clinical effectiveness research. Although Congress has indicated that this funding is intended to improve the quality of health care, it remains unclear how the research will impact current Medicare coverage and reimbursement or how new information will influence other third-party payor policies.

In addition, other legislative changes have been proposed and adopted since the PPACA was enacted. Most recently, on August 2, 2011, the President Obama signed into law the Budget Control Act of 2011, which, among other things, creates the Joint Select Committee on Deficit Reduction to recommend proposals in spending reductions to Congress. The Joint Select Committee did not achieve a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, which threatened to trigger the legislation's automatic reduction to several government programs, including aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. Congress passed and President Obama signed, however, the American Taxpayer Relief Act of 2012 which delays these required cuts for one year. We expect that the PPACA, as well as other federal or state health care reform measures that may be adopted in the future, could have a material adverse effect on our industry generally and our ability to successfully commercialize our products or could limit or eliminate our spending on certain development projects. The taxes imposed by the PPACA and the expansion in the government's role in the U.S. healthcare industry may result in decreased profits to us, lower reimbursement by payors for our products, and/or reduced medical procedure volumes, all of which may adversely affect our business, financial condition and results of operations.

Managing our growth as we expand operations may strain our resources.

We expect to need to grow rapidly in order to support additional, larger, and potentially international, pivotal clinical trials of our drug candidates, which will place a significant strain on our financial, managerial and operational resources. In order to achieve and manage growth effectively, we must continue to improve and expand our operational and financial management capabilities. Moreover, we will need to increase staffing and to train, motivate and manage our employees. All of these activities will increase our expenses and may require us to raise additional capital sooner than expected. Failure to manage growth effectively could materially harm our business, financial condition or results of operations.

We may expand our business through the acquisition of rights to new product candidates that could disrupt our business, harm our financial condition and may also dilute current stockholders' ownership interests in our company.

Our business strategy includes expanding our products and capabilities, and we may seek acquisitions of drug candidates, antibodies or technologies to do so. Acquisitions involve numerous risks, including substantial cash expenditures; potentially dilutive issuance of equity securities; incurrence of debt and contingent liabilities, some of which may be difficult or impossible to identify at the time of acquisition; difficulties in assimilating acquired technologies or the operations of the acquired companies; diverting our management's attention away from other business concerns; risks of entering markets in which we have limited or no direct experience; and the potential loss of our key employees or key employees of the acquired companies.

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We can make no assurances that any acquisition will result in short-term or long-term benefits to us. We may incorrectly judge the value or worth of an acquired product, company or business. In addition, our future success would depend in part on our ability to manage the rapid growth associated with some of these acquisitions. We cannot assure that we will be able to make the combination of our business with that of acquired products, businesses or companies work or be successful. Furthermore, the development or expansion of our business or any acquired products, business or companies may require a substantial capital investment by us. We may not have these necessary funds or they might not be available to us on acceptable terms or at all. We may also seek to raise funds by selling shares of our preferred or common stock, which could dilute each current stockholder's ownership interest in the Company.

Risks Related to Ownership of Our Common Stock

Shares of our capital stock are not registered under the Securities Act of 1933 and there is a lack of liquidity for our securities.

Though our Common Stock is listed on the OTCBB and OTCQB, there is little to no market for our Common Stock. Investors may have to bear the economic risk of an investment in the Company for an indefinite period of time. At this time, the offer and sale of our securities will not be registered under the Securities Act or any state securities laws. Each purchaser of Common Stock will be required to represent that it is purchasing such stock for its own account for investment purposes and not with a view to resale or distribution. No transfer of Common Stock issued may be made unless such transfer is registered under the Securities Act and applicable state securities laws, or an exemption therefrom is available, which will be noted on a restrictive legend placed on each Common Stock certificate. In connection with any such transfer, we may require the transferor to provide us with an opinion of legal counsel stating that the transfer complies with such securities laws and to pay any costs we incur in connection with such transfer and our review thereof as a precondition to the effectiveness of the transfer. There is no public trading market for our warrants and such trading market may never exist.

Resale of our securities is subject to significant restrictions.

Any of our securities that are sold are under exemptions from registration under applicable federal and state securities laws, as none of our securities have been registered under the Securities Act or any state securities laws. Until our securities have been registered, they may not be transferred or resold except in a transaction exempt from or not subject to the registration requirements of the Securities Act and applicable state securities laws. The SEC has broad discretion to determine whether any registration statement will be declared effective and may delay or deny the effectiveness of any registration statement filed by us for a variety of reasons. In the event that the effectiveness of any registration statement relating to resales of the shares of our securities is delayed or denied, or the registration statement, once effective, becomes unavailable for use by selling security holders, the transferability of the shares of Common Stock may be restricted and the value of such securities could be materially adversely affected.

If our ability to register our shares is limited, the ability of holders of our shares to sell them may be subject to substantial restrictions, and you may be required to hold such securities for a period of time prior to sale, in which case you could suffer a substantial loss on such shares.

If our ability to register the resale of shares of our Common Stock is limited, you may not be able to exercise all or some of your Warrants for shares of our Common Stock that are registered for resale. There will be substantial restrictions on your ability to transfer any shares which are not registered for resale, and you may be required to hold the shares you receive upon exercise of your Warrants for some period of time after exercise. During such time, the market price of our Common Stock may fluctuate and you could suffer a substantial or total loss with respect to such shares.

Because we became public by means of a “reverse merger,” we may not be able to attract the attention of major brokerage firms.

Additional risks may exist since we became public through a “reverse merger.” Securities analysts of major brokerage firms may not provide coverage of us since there is little incentive to brokerage firms to recommend the purchase of our common stock. We cannot assure you that brokerage firms will want to conduct any secondary offerings on behalf of our company in the future.

Because we were formerly an SEC-reporting shell company, we are subject to SEC rules on seasoning requirements.

The Company, since it was formerly an SEC-reporting shell company, is also subject to SEC rules which require such companies to trade in the over-the-counter markets (or some other national exchanges) for one full fiscal year and to file all periodic reports with the SEC before seeking to “uplist” to a national securities exchange like NASDAQ or NYSE MKT. The Company can only bypass the one year over-the-counter trading requirement if it can complete a firm commitment underwritten public offering with gross proceeds of at least $40 million. As a result, our stockholders may find it more difficult to dispose of shares or obtain accurate quotations as to the market value of our common stock.

The sale of securities by us in any equity or debt financing could result in dilution to our existing stockholders and have a material adverse effect on our earnings.

Any sale of common stock by us in a future private placement offering could result in dilution to the existing stockholders as a direct result of our issuance of additional shares of our capital stock. In addition, our business strategy may include expansion through internal growth, by acquiring subscribers email lists, or by establishing strategic relationships with targeted customers and vendor. In order to do so, or to finance the cost of our other activities, we may issue additional equity securities that could dilute our stockholders’ stock ownership. We may also assume additional debt and incur impairment losses related to goodwill and other tangible assets if we acquire another company and this could negatively impact our earnings and results of operations.

Future sales of our common stock in the public market could lower the price of our common stock and impair our ability to raise funds in future securities offerings.

Future sales of a substantial number of shares of our common stock in the public market, or the perception that such sales may occur, could adversely affect the then prevailing market price of our common stock and could make it more difficult for us to raise funds in the future through a public offering of our securities.

Our Common Stock is quoted on the OTCBBand OTCQB which may have an unfavorable impact on our stock price and liquidity.

Our common stock is quoted on the OTCBB and OTCQB, which is a significantly more limited trading market than the New York Stock Exchange or The NASDAQ Stock Market. The quotation of the Company’s shares on the OTCBB and OTCQB may result in a less liquid market available for existing and potential stockholders to trade shares of our common stock, could depress the trading price of our common stock and could have a long-term adverse impact on our ability to raise capital in the future.

There is limited liquidity on the OTCBBand OTCQB which may result in stock price volatility and inaccurate quote information.

When fewer shares of a security are being traded on the OTCBB and OTCQB, volatility of prices may increase and price movement may outpace the ability to deliver accurate quote information. Due to lower trading volumes in

shares of our common stock, there may be a lower likelihood of one's orders for shares of our common stock being executed, and current prices may differ significantly from the price one was quoted at the time of one's order entry.

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Our common stock is extremely thinly traded, so you may be unable to sell at or near asking prices or at all if you need to sell your shares to raise money or otherwise desire to liquidate your shares.

Currently, the Company's common stock is quoted in the OTCBB and OTCQB and future trading volume may be limited by the fact that many major institutional investment funds, including mutual funds, as well as individual investors follow a policy of not investing in OTCBB and OTCQB stocks and certain major brokerage firms restrict their brokers from recommending OTCBB and OTCQB stocks because they are considered speculative, volatile and thinly traded. The OTCBB and OTCQB market is an inter-dealer market much less regulated than the major exchanges and our common stock is subject to abuses, volatility and shorting. Thus, there is currently no broadly followed and established trading market for the Company's common stock. An established trading market may never develop or be maintained. Active trading markets generally result in lower price volatility and more efficient execution of buy and sell orders. Absence of an active trading market reduces the liquidity of the shares traded there.

Our Common Stock is subject to price volatility unrelated to our operations.

The trading volume of our common stock has been and may continue to be extremely limited and sporadic. As a result of such trading activity, the quoted price for the Company's common stock on the OTCBB and OTCQB may not necessarily be a reliable indicator of its fair market value. Further, if we cease to be quoted, holders would find it more difficult to dispose of our common stock or to obtain accurate quotations as to the market value of the Company's common stock and as a result, the market value of our common stock likely would decline.

We expect the market price of our Common Stock to fluctuate substantially due to a variety of factors, including market perception of our ability to achieve our planned growth, quarterly operating results of other companies in the same industry, trading volume in our common stock, changes in general conditions in the economy and the financial markets or other developments affecting the Company's competitors or the Company itself. In addition, the OTCBB is subject to extreme price and volume fluctuations in general. This volatility has had a significant effect on the market price of securities issued by many companies for reasons unrelated to their operating performance and could have the same effect on our common stock.

We are an "emerging growth company" under the JOBS Act of 2012 and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company", as defined in the Jumpstart Our Business Startups Act of 2012 ("JOBS Act"), and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including, but not limited to, not being required to comply with the auditor attestation requirements of section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, Section 107 of the JOBS Act also provides that an "emerging growth company" can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. In other words, an "emerging growth company" can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We are choosing to take advantage of the extended transition period for complying with new or revised accounting standards.

We will remain an “emerging growth company” for up to five years, although we will lose that status sooner if our revenues exceed $1 billion, if we issue more than $1 billion in non-convertible debt in a three year period, or if the market value of our common stock that is held by non-affiliates exceeds $700 million as of any June 30.

Our status as an “emerging growth company” under the JOBS Act of 2012 may make it more difficult to raise capital as and when we need it.

Because of the exemptions from various reporting requirements provided to us as an “emerging growth company” and because we will have an extended transition period for complying with new or revised financial accounting standards, we may be less attractive to investors and it may be difficult for us to raise additional capital as and when we need it. Investors may be unable to compare our business with other companies in our industry if they believe that our financial accounting is not as transparent as other companies in our industry. If we are unable to raise additional capital as and when we need it, our financial condition and results of operations may be materially and adversely affected.

We are subject to penny stock regulations and restrictions and you may have difficulty selling shares of our common stock.

We are subject to the provisions of Section 15(g) and Rule 15g-9 of the Exchange Act, commonly referred to as the “penny stock rule.” Section 15(g) sets forth certain requirements for transactions in penny stock, and Rule 15g-9(d) incorporates the definition of “penny stock” that is found in Rule 3a51-1 of the Exchange Act. The SEC generally defines a penny stock to be any equity security that has a market price less than $5.00 per share, subject to certain exceptions. We will be subject to the SEC’s penny stock rules.

Since our Common Stock is deemed to be penny stock, trading in the shares of our common stock is subject to additional sales practice requirements on broker-dealers who sell penny stock to persons other than established customers and accredited investors. “Accredited investors” are persons with assets in excess of $1,000,000 (excluding the value of such person’s primary residence) or annual income exceeding $200,000 or $300,000 together with their spouse. For transactions covered by these rules, broker-dealers must make a special suitability determination for the purchase of such security and must have the purchaser’s written consent to the transaction prior to the purchase. Additionally, for any transaction involving a penny stock, unless exempt the rules require the delivery, prior to the first transaction of a risk disclosure document, prepared by the SEC, relating to the penny stock market. A broker-dealer also must disclose the commissions payable to both the broker-dealer and the registered representative and current quotations for the securities. Finally, monthly statements must be sent disclosing recent price information for the penny stocks held in an account and information to the limited market in penny stocks. Consequently, these rules may restrict the ability of broker-dealer to trade and/or maintain a market in our common stock and may affect the ability of the Company’s stockholders to sell their shares of common stock.

There can be no assurance that our shares of common stock will qualify for exemption from the Penny Stock Rule. In any event, even if our common stock was exempt from the Penny Stock Rule, we would remain subject to Section 15(b)(6) of the Exchange Act, which gives the SEC the authority to restrict any person from participating in a distribution of penny stock if the SEC finds that such a restriction would be in the public interest.

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Because we do not intend to pay dividends, stockholders will benefit from an investment in our Common Stock only if it appreciates in value.

We have never declared or paid any cash dividends on our Preferred Stock or Common Stock. For the foreseeable future, it is expected that earnings, if any, generated from our operations will be used to finance the growth of our business, and that no dividends will be paid to holders of the Company's Preferred Stock or Common Stock. As a result, the success of an investment in our Preferred Stock or Common Stock will depend upon any future appreciation in its value. There is no guarantee that our Preferred Stock or Common Stock will appreciate in value.

Certain provisions of our Articles of Incorporation and Bylaws and Nevada law make it more difficult for a third party to acquire us and make a takeover more difficult to complete, even if such a transaction were in the stockholders' interest.

Our Articles of Incorporation and Bylaws and certain provisions of Nevada State law could have the effect of making it more difficult or more expensive for a third party to acquire, or from discouraging a third party from attempting to acquire, control of the Company, even when these attempts may be in the best interests of our stockholders. For example, Nevada law provides that approval of a majority of the stockholders is required to remove a director, which may make it more difficult for a third party to gain control of the Company. This concentration of ownership limits the power to exercise control by the minority shareholders.

Compliance with the reporting requirements of federal securities laws can be expensive.

We are subject to the information and reporting requirements of the Exchange Act and other federal securities laws, and the compliance obligations of the Sarbanes-Oxley Act. The costs of preparing and filing annual and quarterly reports and other information with the SEC and furnishing audited reports to stockholders are substantial. In addition, we will incur substantial expenses in connection with the preparation of registration statements and related documents with respect to the registration of resale of the Common Stock.

Applicable regulatory requirements, including those contained in and issued under the Sarbanes-Oxley Act, may make it difficult for us to retain or attract qualified officers and directors, which could adversely affect the management of its business and its ability to obtain or retain listing of our Common Stock.

We may be unable to attract and retain those qualified officers, directors and members of board committees required to provide for effective management because of the rules and regulations that govern publicly held companies, including, but not limited to, certifications required by principal executive officers. The enactment of the Sarbanes-Oxley Act has resulted in the issuance of a series of related rules and regulations and the strengthening of existing rules and regulations by the SEC, as well as the adoption of new and more stringent rules by the stock exchanges. The perceived increased personal risk associated with these changes may deter qualified individuals from accepting roles as directors and executive officers.

Further, some of these changes heighten the requirements for board or committee membership, particularly with respect to an individual's independence from the corporation and level of experience in finance and accounting matters. We may have difficulty attracting and retaining directors with the requisite qualifications. If we are unable to attract and retain qualified officers and directors, the management of our business and our ability to obtain or retain listing of our shares of Common Stock on any stock exchange (assuming we elect to seek and are successful in obtaining such listing) could be adversely affected.

If we fail to maintain an effective system of internal controls, we may not be able to accurately report our financial results or detect fraud. Investors could lose confidence in our financial reporting and this may decrease the trading

price of our Common Stock.

We must maintain effective internal controls to provide reliable financial reports and detect fraud. We have been assessing our internal controls to identify areas that need improvement. Failure to maintain an effective system of internal controls could harm our operating results and cause investors to lose confidence in our reported financial information. Any such loss of confidence would have a negative effect on the trading price of our Common Stock.

The price of our common stock may become volatile, which could lead to losses by investors and costly securities litigation.

The trading price of our Common Stock may be highly volatile and could fluctuate in response to factors such as:

- actual or anticipated variations in our operating results;
- announcements of developments by us or our competitors;
- the timing of IND and/or NDA approval, the completion and/or results of our clinical trials;
- regulatory actions regarding our products;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- adoption of new accounting standards affecting the our industry;
- additions or departures of key personnel;
- introduction of new products by us or our competitors;
- sales of the our Common Stock or other securities in the open market; and
- other events or factors, many of which are beyond our control.

The stock market is subject to significant price and volume fluctuations. In the past, following periods of volatility in the market price of a company’s securities, securities class action litigation has often been initiated against such a company. Litigation initiated against us, whether or not successful, could result in substantial costs and diversion of our management’s attention and Company resources, which could harm our business and financial condition.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward looking statements that involve risks and uncertainties, principally in the sections entitled “Description of Business,” “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” All statements other than statements of historical fact contained in this prospectus, including statements regarding future events, our future financial performance, business strategy and plans and objectives of management for future operations, are forward-looking statements. We have attempted to identify forward-looking statements by terminology including “anticipates,” “believes,” “can,” “continue,” “could,” “estimates,” “expects,” “intend “plans,” “potential,” “predicts,” “should,” or “will” or the negative of these terms or other comparable terminology. Although do not make forward looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under “Risk Factors” or elsewhere in this prospectus, which may cause our or our industry’s actual results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time and it is not possible for us to predict all risk factors, nor can we address the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause our actual results to differ materially from those contained in any forward-looking statements. All forward-looking statements included in this document are based on information available to us on the date hereof, and we assumes no obligation to update any such forward-looking statements.

You should not place undue reliance on any forward-looking statement, each of which applies only as of the date of this prospectus. Before you invest in our securities, you should be aware that the occurrence of the events described in the section entitled “Risk Factors” and elsewhere in this prospectus could negatively affect our business, operating results, financial condition and stock price. Except as required by law, we undertake no obligation to update or revise publicly any of the forward-looking statements after the date of this prospectus to conform our statements to actual results or changed expectations.

DIVIDEND POLICY

We plan to retain any earnings for the foreseeable future for our operations. We have never paid any dividends on our common stock and do not anticipate paying any cash dividends in the foreseeable future. Any future determination to pay cash dividends will be at the discretion of our Board of Directors and will depend on our financial condition, operating results, capital requirements and such other factors as our Board of Directors deems relevant. In addition, our credit facility restricts our ability to pay dividends.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the common stock by the selling stockholders. However, we may receive up to approximately $14,811,084 in the aggregate upon the exercise of the warrants if the holders exercise them for cash. The registration of common stock pursuant to this prospectus does not necessarily mean that any of those shares will ultimately be offered or sold by the selling stockholders. We intend to use the proceeds received from any cash exercise of the warrants for working capital and general corporate purposes.

DILUTION

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

PENNY STOCK CONSIDERATIONS

Our common stock will be a penny stock, therefore, trading in our securities is subject to penny stock considerations. Broker-dealer practices in connection with transactions in “penny stocks” are regulated by certain penny stock rules adopted by the SEC.

Penny stocks generally are equity securities with a price of less than $5.00 (other than securities registered on certain national securities exchanges or quoted on the NASDAQ system). Penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document that provides information about penny stocks and the risks in the penny stock market. The broker-dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction, and monthly account statements showing the market value of each penny stock held in the customer’s account. The broker-dealer must also make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser’s written agreement to the transaction. These requirements may have the effect of reducing the level of trading activity, if any, in the secondary market for a security that becomes subject to the penny stock rules. The additional burdens imposed upon broker-dealers by such requirements may discourage broker-dealers from effecting transactions in our securities, which could severely limit their market price and liquidity of our securities. These requirements may restrict the ability of broker-dealers to sell our common stock and may affect your ability to resell our common stock.

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SELLING STOCKHOLDERS

The common shares being offered for resale by the selling stockholders consist of 27,129,916 shares of our common stock that are issued and outstanding, including up to (i) 14,281,952 shares of common stock, par value $0.01 per share, held by the selling stockholders, (ii) 3,118,968 shares of our common stock issuable upon exercise of Series A warrants held by the selling stockholders at an exercise price of $1.65 per share, (iii) 1,559,437 shares of our common stock issuable upon exercise of Series B warrants held by the selling stockholders at an exercise price of $2.48 per share, (iv) 2,700,971 shares of our common stock issuable upon exercise of the Stock Offering warrants held by the selling stockholders at an exercise price of $0.78 per share, (v) 3,755,562 shares of our common stock issuable upon exercise of consulting firm warrants held by the selling stockholders at an exercise price of $0.01 per share, (vi) 1,245,210 shares of our common stock issuable upon exercise of placement agent warrants held by the selling stockholders at an exercise price of $0.78 per share, (vii) 467,845 shares of our common stock issuable upon exercise of placement agent warrants held by the selling stockholders at an exercise price of $1.65 per share. These holders include investors in private placement and notes offerings of our subsidiary Actinium that closed (A) on December 19, 2012 for the sale of units consisting of an aggregate of (i) 3,118,968 shares of common stock, (ii) Series A warrants to purchase 3,118,968 shares of common stock, and (iii) Series B warrants to purchase up to 1,559,484 shares of common stock, (B) during 2011 and January 2012 for the sale of units consisting of an aggregate of (i) 15,922,760 shares of common stock (after conversion of preferred stock and dividends), and (ii) Stock Offering warrants to purchase 2,682,140 shares of common stock, and (C) on December 27, 2011, whereby Actinium completed a private offering of 8% Senior Subordinated Unsecured Convertible Promissory Notes in the amount of $900,000 and received net proceeds of $750,000, and the notes have converted to 1,148,275 shares of common stock.

The following table sets forth certain information regarding the selling stockholders and the shares offered by them in this prospectus. Each selling stockholder's percentage of ownership is based upon 21,385,573 shares of common stock outstanding as of March 12, 2013, assuming a 100% share exchange by Actinium shareholders, and all securities which the person has the right to acquire within 60 days through the exercise of any option or warrant or through the conversion of a convertible security.

Name of Selling Stockholder	Shares Beneficially Owned prior to Offering	Percentage (%) Beneficially Owned prior to Offering	Shares to Offer (1)	Shares Beneficially Owned after Offering	Percentage Beneficially Owned After Offering
Adam Baker	111,300	*	111,300 (1)	-	-
Alan Aranha	22,533	*	22,533 (2)		
Albert H. Konetzni, Jr. and Shirley A. Konetzni (JTTEN)	85,195	*	85,195 (3)	-	-
Alexander Sepulveda IRA - Sterne Agee & Leach Inc. C/F Alexander	151,362	*	151,362 (4)	-	-
Amrosan LLC	475,173	1.7515 %	475,173 (5)	-	-
Andres Wawrla	378,407	1.3948 %	378,407 (6)	-	-
Andrew Bellamy	75,682	*	75,682 (7)	-	-
Andrew Chandler	43,073	*	43,073 (8)	-	-
Andrew Charles Good & Fiona McPhee (JTWROS)	45,407	*	45,407 (9)	-	-
Anthony D'Amato	64,198	*	64,198 (10)	-	-
Aparna Beeram	32,406	*	32,406 (11)	-	-
Benjamin Hasty	103,434	*	103,434 (12)	-	-
Billy W. Harris	37,840	*	37,840 (13)	-	-

Bioche Asset Management LLC	721,068	2.6578	%	721,068	(14)		
Bohdan Chaban	85,588	*		85,588	(15)	-	-
Brendan Sullivan	33,128	*		33,128	(16)	-	-
Brian E. Jones and Peggy A. Jones (JTWROS)	342,351	1.2619	%	342,351	(17)	-	-
Brian Miller IRA, (Robert W. Baird & Co., Inc. TTEE, FBO Brian Miller IRA Acct # 6144 2867)	173,400	*		173,400	(18)	-	-
Brian Murray	3,636	*		3,636	(19)	-	-
Brian Robertson	105,983	*		105,983	(20)	-	-
Bruce Porter	39,223	*		39,223	(21)	-	-
Bruno Donnou	151,362	*		151,362	(22)	-	-
Bruno J. Casatelli	137,380	*		137,380	(23)	-	-

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Bryan J. Hanks & Michelle B. Hanks (JTWROS)	81,189	*		81,189	(24)	-	-
Buff Trust	274,091	1.0103	%	274,091	(25)	-	-
Burton Mark Paull	86,699	*		86,699	(26)	-	-
C.S. Leslie Malcolm	75,682	*		75,682	(27)	-	-
Carl F. Muckenhin	43,349	*		43,349	(28)	-	-
Carnegie Hill Asset Partners	353,023	1.3012	%	353,023	(29)		
Carol A. Wilson IRA - Sterne Agee Leach Inc. C/F Carol A.	15,135	*		15,135	(30)	-	-
Chad A. Elms	151,362	*		151,362	(31)	-	-
Charles J. Magolske	17,339	*		17,339	(32)	-	-
Charles L Weidner TTEE & Alice N Barrett Weidner TTEE FBO The Weidner Family Revocable Trust DTD 8/13/07	301,781	1.1124	%	301,781	(33)	-	-
Charles L. Vinn	37,840	*		37,840	(34)	-	-
Charles W. Ganse	42,409	*		42,409	(35)	-	-
Chris Marshall	30,272	*		30,272	(36)	-	-
Chris McHugh	237,491	*		237,491	(37)	-	-
Christina G. Einstein IRA, Sterne Agee & Leach Inc C/F Christina G.	85,784	*		85,784	(38)	-	-
Christopher J. Mehos	85,784	*		85,784	(39)	-	-
Christopher Kane	1,435	*		1,435	(40)	-	-
Christopher M. Johnston	43,349	*		43,349	(41)	-	-
Christopher Oppito	26,355	*		26,355	(42)	-	-
Clayton A. and Stephanie S., Reed	43,349	*		43,349	(43)	-	-
Clint N. Duty	86,699	*		86,699	(44)	-	-
Conor Gilligan	9,081	*		9,081	(45)	-	-
Conor Stanley	138,005	*		138,005	(46)	-	-
Craig Bonn	3,382	*		3,382	(47)	-	-
Daniel P. Wikel	86,699	*		86,699	(48)	-	-
Daniel W. Kuhar	2,392	*		2,392	(49)	-	-
David A. Kuhar	26,009	*		26,009	(50)	-	-
David Cantwell	181,176	*		181,176	(51)	-	-
David Hicks Pension Fund	30,272	*		30,272	(52)	-	-
David Patterson	37,840	*		37,840	(53)	-	-
David W. Frost	330,317	1.2175	%	330,317	(54)	-	-
David W. Frost IRA - Sterne Agee & Leach Inc. C/F	6,052	*		6,052	(55)	-	-
Dean L. Fox	346,800	1.2783	%	346,800	(56)	-	-
Deborah L. Katz	42,663	*		42,663	(57)	-	-
Denis O'Brien	867,043	3.1959	%	867,043	(58)		
Dianne M. Scheck	173,400	*		173,400	(59)	-	-
Donald K. Coffey	37,840	*		37,840	(60)	-	-
Douglas A. Alcott	37,840	*		37,840	(61)	-	-
Douglas E. Eckert	43,349	*		43,349	(62)	-	-
Douglas J Amos & Carol A. Amos, JTWROS	67,655	*		67,655	(63)	-	-
Douglas R. Holroyd & Jill K. Holroyd (JTWROS)	67,854	*		67,854	(64)	-	-

Dr. John M. Ferriter	42,891	*		42,891	(65)	-	-
Dr. Richard & Anita Matter JTWROS	94,551	*		94,551	(66)	-	-
Earl R. Richardson	130,049	*		130,049	(67)	-	-
Edward C. Moore	75,682	*		75,682	(68)	-	-
Edwin A. Schermerhorn Roth IRA -Sterne Agee & Leach Inc. C/F	37,840	*		37,840	(69)	-	-
Eitner Family Trust	174,634	*		174,634	(70)		
Eliana Cardenas and Roberto Mendez, (JTWROS)	43,136	*		43,136	(71)	-	-
Enguerrand de Ponteves	30,272	*		30,272	(72)	-	-
Eugene E. Eubank	37,840	*		37,840	(73)	-	-
Evan Stern	287	*		287	(74)	-	-
Francis Smith	33,669	*		33,669	(75)	-	-
Frank Davis	43,349	*		43,349	(76)	-	-
Garnett Trust	274,091	1.0103	%	274,091	(77)	-	-
Garry M. Higdem	37,840	*		37,840	(78)	-	-
Gary A.Washauer	43,349	*		43,349	(79)	-	-

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Gene R. Carlson & Cynthia L Carlson, JTWROS	51,253	*		51,253	(80)	-	-
George B. Beam	17,339	*		17,339	(81)	-	-
George Elefther & Karin Alexa Elefther (JTWROS)	75,682	*		75,682	(82)	-	-
George Elefther IRA	213,281	*		213,281	(83)	-	-
George M Zelinski	249,082	*		249,082	(84)	-	-
Gerhard Plaschka	47,235	*		47,235	(85)	-	-
Gonzalo A Salgueiro	102,830	*		102,830	(86)	-	-
Grant L. Hanby	37,840	*		37,840	(87)	-	-
Gregory F. Sullivan & Gene M. Sullivan (JTWROS)	65,085	*		65,085	(88)	-	-
Gregory F., MD and Gene M. Sullivan	103,195	*		103,195	(89)	-	-
Halsey, Sterne Agee & Leach Inc C/F Jimmy R. Hasley IRA	243,980	*		243,980	(90)	-	-
Harold O. LaFlash and Greta G. LaFlash (JTWROS)	43,349	*		43,349	(91)	-	-
Harvest Financial Services Ltd.	212,131	*		212,131	(92)	-	-
Helmut Koehler	75,682	*		75,682	(93)	-	-
Hicks Foods Ltd.	49,950	*		49,950	(94)	-	-
Hochman Family LLP	45,407	*		45,407	(95)	-	-
Hugh Marasa	25,306	*		25,306	(96)	-	-
Hugh Regan	44,045	*		44,045	(97)	-	-
Ian H. Murray	439,807	1.6211	%	439,807	(98)	-	-
Immotrend Inc.	529,772	1.9527	%	529,772	(99)	-	-
Island Capital Nominees Ltd.	416,250	1.5343	%	416,250	(100)	-	-
J. Brian Boulter	151,362	*		151,362	(101)	-	-
James Ahern	1,001,604	3.6919	%	1,001,604	(102)	-	-
James G. Markey and Carolyn L. Markey	15,135	*		15,135	(103)	-	-
James L. Payne	60,545	*		60,545	(104)	-	-
James M. Wimberly	43,349	*		43,349	(105)	-	-
James Payne	102,507	*		102,507	(106)	-	-
James Provenzano	531	*		531	(107)	-	-
James T. Dietz & Barbara J. Dietz (JTWROS)	37,840	*		37,840	(108)	-	-
James Thompson	1,913	*		1,913	(109)	-	-
James W. Lees	119,031	*		119,031	(110)	-	-
Jan J. Laskowski and Sofia M. Laskowski (JTWROS)	86,699	*		86,699	(111)	-	-
Jared Sullivan & Shannon Sullivan	10,595	*		10,595	(112)	-	-
Jared Sullivan MD	21,658	*		21,658	(113)	-	-
Jayson Russo	10,789	*		10,789	(114)	-	-
Jeff C. Kleinschmidt	151,362	*		151,362	(115)	-	-
Jeff L. Stevens	151,362	*		151,362	(116)	-	-
Jimmy R. Hasley IRA	92,256	*		92,256	(117)	-	-
John and Mueller, Bernadette Pimpinella, (JTWROS)	17,339	*		17,339	(118)	-	-
John H. Welsh, IRA (Sterne Agee & Leach Inc. C/F John H. Welsh Roth IRA)	42,663	*		42,663	(119)	-	-

John L. Sommer IRA, SAL C/F	260,099	*	260,099	(120)	-	-
John M. Duffey	49,216	*	49,216	(121)	-	-
John M. Harrington	15,022	*	15,022	(122)		
John Malfer & Toni Malfer (JTWROS)	151,362	*	151,362	(123)	-	-
John W. Eilers, Jr	43,136	*	43,136	(124)	-	-
John-Paul Eitner	91,605	*	91,605	(125)	-	-
Jonathan Smith	75,682	*	75,682	(126)	-	-
Jorge Borbolla	43,136	*	43,136	(127)	-	-
Joseph Fedorko	4,306	*	4,306	(128)	-	-
Joseph P. Acquavella	7,567	*	7,567	(129)	-	-
Joseph Rozof	5,550	*	5,550	(130)	-	-
Joseph T. Oppito	26,009	*	26,009	(131)	-	-
Justin McKenna	22,702	*	22,702	(132)	-	-
Keith A. Zar	124,539	*	124,539	(133)	-	-
Ken. R. Klimitchek	85,325	*	85,325	(134)	-	-
Kenneth G. Williamson	102,507	*	102,507	(135)	-	-
Kenneth N. Larsen Trust U/A/D 9/25/09, Kenneth N. Larsen Trustee	86,699	*	86,699	(136)	-	-
Kerston Coombs	37,840	*	37,840	(137)	-	-
Kevin J. Poor	36,327	*	36,327	(138)	-	-
Kevin Lynch	15,135	*	15,135	(139)	-	-
Kevin O'Connor	22,913	*	22,913	(140)	-	-
Kevin P. McCarthy	189,529	*	189,529	(141)	-	-
Kevin R. Wilson	62,935	*	62,935	(142)	-	-

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Kimberly J. Macurdy IRA - Sterne Agee & Leach Inc. C/F	22,702	*		22,702	(143)	-	-
Konetzni JR JT TEN, Shirley A Konetzi & Albert H	51,415	*		51,415	(144)	-	-
Lachewitz - Stern Agee & Leach Inc. C/F Walter J. Jr. IRA	37,840	*		37,840	(145)	-	-
Laidlaw Holdings PLC	86,612	*		86,612	(146)	-	-
Lance Ziaks & Janet Ziaks JTWROS	16,963	*		16,963	(147)	-	-
Lark Enterprises, Ltd.	85,325	*		85,325	(148)	-	-
Larry G. Majerus	72,605	*		72,605	(149)	-	-
Laurence B. Jacobs	60,545	*		60,545	(150)	-	-
Lindsay Aranha	15,022	*		15,022	(151)		
Lytle, Jon H. and Carrie M. (JTWROS)	85,325	*		85,325	(152)	-	-
Mabie JTWROS, Gary J & Janelle L	18,509	*		18,509	(153)	-	-
Maree Casatelli	15,135	*		15,135	(154)	-	-
Maree Casatelli SEP IRA - Sterne Agee & Leach Inc. C/F Maree	22,702	*		22,702	(155)	-	-
Mark A. Maki & Sara L. Maki (JTWROS)	75,682	*		75,682	(156)	-	-
Mark C. Jasek	37,840	*		37,840	(157)	-	-
Mark Suwyn Roth IRA - Sterne Agee & Leach Inc. C/F	227,045	*		227,045	(158)	-	-
Marvin S. Rosen	46,818	*		46,818	(159)	-	-
Matthew Eitner	826,970	3.0482	%	826,970	(160)	-	-
Matthew Reid	86,699	*		86,699	(161)	-	-
Matura Family Trust UA 05-26-1998	37,840	*		37,840	(162)	-	-
Michael Ahern	2,145	*		2,145	(163)	-	-
Michael B. Carroll & Sheila J. Carroll (JTWROS)	492,651	1.8159	%	492,651	(164)	-	-
Michael D. Watson	37,840	*		37,840	(165)	-	-
Michael E. Whitley	43,349	*		43,349	(166)	-	-
Michael Engdall & Susan Engdall (JTWROS)	139,676	*		139,676	(167)	-	-
Michael K. Barber & Julia Barber (JTWROS)	127,701	*		127,701	(168)	-	-
Michael L. Turner	34,679	*		34,679	(169)	-	-
Michael M. Hart	17,199	*		17,199	(170)	-	-
Michael Murray	104,279	*		104,279	(171)	-	-
Michael R. Chambers	43,349	*		43,349	(172)	-	-
Michael Stanley	51,470	*		51,470	(173)	-	-
Minta Group LLC	42,663	*		42,663	(174)	-	-
Nabil M. Yazgi	73,955	*		73,955	(175)	-	-
Nabil Yazgi MD PA 401(K) Profit Sharing Plan and Trust	22,702	*		22,702	(176)	-	-
Nabil Yazgi MD PA Cash Balance Plan & Trust 12-28-2008	7,567	*		7,567	(177)	-	-
Nicholas Gupta	909	*		909	(178)	-	-
Patrick Maddren	455	*		455	(179)	-	-
Patrick S. Thomas	37,840	*		37,840	(180)	-	-
	151,362	*		151,362	(181)	-	-

Paul A. Wildberger & Janice Wildberger (JTWROS)							
Peter H. Colettis	37,840	*		37,840	(182)	-	-
Peter H. Silverman	1,637	*		1,637	(183)	-	-
Peter J. and Tiffany B. Zaborowski, (JTWROS)	249,082	*		249,082	(184)	-	-
Peter Malone	287	*		287	(185)	-	-
Philip Stephenson	37,840	*		37,840	(186)	-	-
Phillip Todd Herndon	127,989	*		127,989	(187)	-	-
Rafael Penunuri	30,272	*		30,272	(188)	-	-
Raja Appachi	45,407	*		45,407	(189)	-	-
Randall L & Kathy S Payne, JTWROS	51,253	*		51,253	(190)	-	-
Randy Payne IRA - Sterne Agee & Leach Inc. C/F Randy	37,840	*		37,840	(191)	-	-
Ray Sinnott	58,665	*		58,665	(192)	-	-
Ray Sinnott Pension Fund	22,053	*		22,053	(193)	-	-
Reed Family Trust DTD 06-24-1999 Clayton A Reed & Stephanie S. Reed TTEES	75,682	*		75,682	(194)	-	-
Rex A. Jones	343,136	1.2648	%	343,136	(195)	-	-
Richard A. Levine	1,010,836	3.7259	%	1,010,836	(196)	-	-
Richard Brewster	22,913	*		22,913	(197)	-	-
Richard Burgess	22,702	*		22,702	(198)	-	-
Richard Buttine	3,136	*		3,136	(199)	-	-
Richard G. Michalski	250,746	*		250,746	(200)	-	-
Richard L. Herweck	17,339	*		17,339	(201)	-	-
Rikin Jobanputra	7,318	*		7,318	(202)	-	-

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Rippee Mineral Management LLC	50,905	*		50,905	(203)			
Robert Bonaventura	35,458	*		35,458	(204)	-		-
Robert Dunn	173,400	*		173,400	(205)	-		-
Robert H. Krauch	346,800	1.2783	%	346,800	(206)	-		-
Robert Hair	37,840	*		37,840	(207)	-		-
Robert J Laubenthal	51,415	*		51,415	(208)	-		-
Robert LeBoyer	1,665	*		1,665	(209)	-		-
Robert N. Blank	43,349	*		43,349	(210)	-		-
Robert Rotunno	2,255	*		2,255	(211)	-		-
Robert T. Stapell	43,349	*		43,349	(212)	-		-
Roger Conan	242,630	*		242,630	(213)	-		-
Roger K. Cady R/O IRA	85,658	*		85,658	(214)	-		-
Ron D. Craig	414,472	1.5277	%	414,472	(215)	-		-
Ron Zuckerman	7,090	*		7,090	(216)	-		-
Ronald J. Woodward	37,840	*		37,840	(217)	-		-
Ronald Soicher	60,689	*		60,689	(218)	-		-
Ryan Turcotte	29,121	*		29,121	(219)	-		-
Sandesh Seth	121,958	*		121,958	(220)	-		-
Sandra F. Tomlinson	64,402	*		64,402	(221)	-		-
Schneider, STERNE AGEE & LEACH INC C/F Pat Schneider IRA	61,504	*		61,504	(222)	-		-
Scott L. Byer	43,349	*		43,349	(223)	-		-
Sepulveda Roth IRA - Sterne Agee & Leach Inc. C/F Mercedes	211,907	*		211,907	(224)	-		-
Sharon M. Smith	17,339	*		17,339	(225)	-		-
Simon Guscott	51,353	*		51,353	(226)	-		-
Sohin Shah	832	*		832	(227)	-		-
Srinivasa Rajan	8,481	*		8,481	(228)	-		-
Stephen and Tracy Park, (JTWROS)	51,764	*		51,764	(229)	-		-
Stephen Fischgrund	26,009	*		26,009	(230)	-		-
Stephen Hamilton	90,798	*		90,798	(231)	-		-
Sterne Agee & Leach Inc. C/F JB Trahern Bene Owner Ann Trahern DCSD IRA	44,614	*		44,614	(232)	-		-
Steven De Decker & Diop Diatou (JTWROS)	75,682	*		75,682	(233)	-		-
Steven K. Nelson	37,840	*		37,840	(234)	-		-
Steven W. and Judith L. Poe	17,118	*		17,118	(235)	-		-
Sullivan II IRA - Sterne Agee & Leach Inc. C/F Gregory F.	8,481	*		8,481	(236)	-		-
Susan H. Lu	30,272	*		30,272	(237)	-		-
Syntec Scientific Ltd. by Ray Sinnott	167,987	*		167,987	(238)	-		-
Thomas and Lillian Murray, (JTWROS)	17,156	*		17,156	(239)	-		-
Thomas C Pugh	51,253	*		51,253	(240)	-		-
Thomas G. Hoffman	178,512	*		178,512	(241)	-		-
Thomas J. Moore & Cathleen Moore (JTWROS)	89,093	*		89,093	(242)	-		-
Thomas N. Metz	37,840	*		37,840	(243)	-		-
Thomas Turley	151,362	*		151,362	(244)	-		-

Timothy A. Kippenhan	75,682	*		75,682	(245)	-	-
Timothy C. Behr	6,171	*		6,171	(246)	-	-
Timothy E. Lemaster	95,369	*		95,369	(247)	-	-
Timothy J. and Catherine A. Pellegrini (JTWROS)	43,349	*		43,349	(248)	-	-
Timothy J. Kane & Annette K. Kane (JTWROS)	51,353	*		51,353	(249)	-	-
Timothy J. Rinker	43,349	*		43,349	(250)	-	-
Timothy P. Johnston	82,364	*		82,364	(251)	-	-
Timothy Wieghaus	126,599	*		126,599	(252)	-	-
Tracy N. Poe	93,155	*		93,155	(253)	-	-
Tracy Poe (Sterne Agee & Leach)	50,890	*		50,890	(254)		
Uday Dandamudi	37,840	*		37,840	(255)	-	-
Variety Investments Limited	515,980	1.9019	%	515,980	(256)	-	-
Velcro LLC	151,362	*		151,362	(257)	-	-
Vinod Moras	832	*		832	(258)	-	-
Willard L Simons	32,802	*		32,802	(259)	-	-
Willard L. Simons IRA - Sterne Agee & Leach Inc. C/F	37,840	*		37,840	(260)	-	-
William A. and Barbara B. Valka, (JTWROS)	43,349	*		43,349	(261)	-	-
William H. Hieronymus	151,362	*		151,362	(262)	-	-
William J. Diamond & Andrea Sullivan (JTWROS)	30,272	*		30,272	(263)	-	-
William L. Lane & Leanne Lane (JTWROS)	37,840	*		37,840	(264)	-	-
William Wade Brawley	43,349	*		43,349	(265)	-	-
William Woodford	37,840	*		37,840	(266)	-	-
Wilson, William, III and Wilson, Patricia White COTTEE of The Wilson Family Restated Living Trust UTA dtd 04/2004	173,400	*		173,400	(267)	-	-
Wojciech Rybacki	24,975	*		24,975	(268)	-	-
Xiaowei Zhou	20,108	*		20,108	(269)	-	-
Yogesh Desai	45,407	*		45,407	(270)	-	-
TOTAL		27,129,916					27,129,916

1 Includes (i) 89,367 shares of common stock and (ii) 21,953 shares of common stock issuable upon the exercise of the Stock Offering warrants (Adam Baker).

2 Includes (i) 22,533 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC (Alan Aranha).

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3 Includes (i) 76,525 shares of common stock and (ii) 8,670 shares of common stock issuable upon the exercise of the Stock Offering warrants. Albert H. Konetzni, Jr. and Shirley A. Konetzni may be deemed to be the beneficial owner of the shares of our common stock held by Albert H. Konetzni, Jr. and Shirley A. Konetzni (JTTEN). Mr. Konetzni and Ms. Konetzni disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Albert H. Konetzni, Jr. and Shirley A. Konetzni).

4 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants. Alexander Sepulveda may be deemed to be the beneficial owner of the shares of our common stock held by the Sepulveda IRA - Sterne Agee & Leach Inc. C/F Alexander. Mr. Sepulveda disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Sepulveda IRA - Sterne Agee & Leach Inc. C/F Alexander),

5 Includes (i) 99,617 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78, exercisable on a cashless basis issued to Amrosan, LLC, a partnership in which the majority member interest is owned by the family of Mr. Seth, a Director of Cactus and (ii) 375,556 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC. (Amrosan, LLC).

6 Includes (i) 151,363 shares of common stock, (ii) 151,363 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 75,681 shares of common stock issuable upon exercise of the Series B warrants (Andres Wawrla).

7 Includes (i) 30,273 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants (Andrew Bellamy).

8 Includes (i) 34,458 shares of common stock and (ii) 8,615 shares of common stock issuable upon the exercise of the Stock Offering warrants (Andrew Chandler).

9 Includes (i) 18,163 shares of common stock, (ii) 18,163 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 9,081 shares of common stock issuable upon exercise of the Series B warrants. Andrew Charles Good & Fiona McPhee may be deemed to be the beneficial owner of the shares of our common stock held by Andrew Charles Good & Fiona McPhee (JTWROS). Mr. Good and Ms. McPhee disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Andrew Charles Good & Fiona McPhee (JTWROS)).

10 Includes (i) 39,250 shares of common stock, (ii) 12,109 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 6,054 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 6,785 shares of common stock issuable upon exercise of the Stock Offering warrants (Anthony D'Amato).

11 Includes (i) 13,054 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78, (ii) 19,352 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Ms. Beeram is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Aparna Beeram.).

12 Includes (i) 83,461 shares of common stock, (ii) 19,973 shares of common stock issuable upon the exercise of the Stock Offering warrants, and (iii) (Benjamin Hasty).

13 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Billy W. Harris).

14 Includes (i) 721,068 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management with Jamess Capital Group, LLC (Bioche Asset Management LLC).

15 Includes (i) 68,470 shares of common stock and (ii) 17,118 shares of common stock issuable upon the exercise of the Stock Offering warrants (Bohdan Chaban).

16 Includes (i) 20,449 shares of common stock, (ii) 3,027 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 1,513 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 5,113 shares of common stock issuable upon exercise of the Stock Offering warrants (Brendan Sullivan).

17 Includes (i) 273,881 shares of common stock and (ii) 68,470 shares of common stock issuable upon the exercise of the Stock Offering warrants. Brian E. Jones and Peggy A. Jones may be deemed to be the beneficial owner of the shares of our common stock held by Brian E. Jones and Peggy A. Jones (JTWROS). Mr. Jones and Ms. Jones disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Brian E. Jones and Peggy A. Jones).

18 Includes (i) 138,720 shares of common stock, (ii) 34,680 shares of common stock issuable upon exercise of the Stock Offering warrants. Brian Miller may be deemed to be the beneficial owner of the shares of our common stock held by Miller, Brian IRA (Robert W. Baird & Co., Inc. TTEE, FBO Brian Miller IRA Acct # 6144 2867. Mr. Miller dislcaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Brian Miller, IRA (Robert W. Baird & Co., Inc. TTEE, FBO Brian Miller IRA Acct # 6144 2867)).

19 Includes (i) 3,636 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Murray is affiliated with the Placement Agent of the Stock Offering (Brian Murray).

20 Includes (i) 20,874 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 78,867 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC and (iii) 6,242 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Robertson is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering. (Brian Robertson.).

21 Includes (i) 35,405 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 3,818 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Porter is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Bruce Porter).

22 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants (Bruno Donnou).

23 Includes (i) 80,488 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 11,483 shares of common stock issuable upon the exercise of the Stock Offering warrants (Bruno J. Casatelli).

24 Includes (i) 49,815 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrant, and (iv) 8,670 shares of common stock issuable upon the exercise of the Stock Offering warrants. Bryan J. Hanks & Michelle B. Hanks may be deemed to be the beneficial owner of the shares of our common stock held by Bryan J. Hanks & Michelle B. Hanks (JTWROS). Mr. Hanks and Ms. Hanks disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary

interest therein (Bryan J. Hanks & Michelle B. Hanks (JTWROS)).

25 Includes (i) 199,236 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 74,855 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Buff Trust is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Buff Trust).

26 Includes (i) 69,359 shares of common stock, (ii) 17,340 shares of common stock issuable upon exercise of the Stock Offering warrants (Burton Mark Paull).

27 Includes (i) 30,273 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants (Malcolm C.S. Leslie).

28 Includes (i) 34,679 shares of common stock, (ii) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants (Carl F. Muckenhin).

29 Includes (i) 353,023 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC (Carnegie Hill Asset Partners).

30 Includes (i) 6,054 shares of common stock, (ii) 6,054 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 3,027 shares of common stock issuable upon exercise of the Series B warrants. Carol A. Wilson may be deemed to be the beneficial owner of the shares of our common stock held by the Carol A. Wilson IRA - Sterne Agee Leach Inc. C/F Carol A. Ms. Wilson disclaims beneficial ownership of such shares, except to the extent of her pecuniary interest therein (Carol A. Wilson IRA - Sterne Agee Leach Inc. C/F Carol A.).

31 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants (Chad A. Elm).

32 Includes (i) 13871 shares of common stock, (ii) 3,468 shares of common stock issuable upon exercise of the Stock Offering warrants (Charles J. Magolske).

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33 Includes (i) 241,425 shares of common stock, (ii) 60,356 shares of common stock issuable upon exercise of the Stock Offering warrants (Charles L Weidner TTEE & Alice N Barrett Weidner TTEE FBO The Weidner Family Revocable Trust DTD 8/13/07).

34 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Charles L. Vinn).

35 Includes (i) 33,927 shares of common stock and (ii) 8,482 shares of common stock issuable upon the exercise of the Stock Offering warrants (Charles W. Ganse).

36 Includes (i) 12,109 shares of common stock, (ii) 12,109 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 6,054 shares of common stock issuable upon exercise of the Series B warrants (Chris Marshall).

37 Includes (i) 189,993 shares of common stock, (ii) 47,498 shares of common stock issuable upon exercise of the Stock Offering warrants (Chris McHugh).

38 Includes (i) 68,627 shares of common stock and (ii) 17,157 shares of common stock issuable upon the exercise of the Stock Offering warrants. Christina Einstein may be deemed to be the beneficial owner of the shares of our common stock held by Christina G. Einstein IRA, Sterne Agee & Leach Inc C/F Christina G. Ms. Einstein disclaims beneficial ownership of such shares, except to the extent of her pecuniary interest therein (Christina G. Einstein IRA, Sterne Agee & Leach Inc C/F Christina G.).

39 Includes (i) 68,627 shares of common stock, (ii) 17,157 shares of common stock issuable upon exercise of the Stock Offering warrants (Christopher J. Mehos).

40 Includes (i) 1,435 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Kane is affiliated with the Placement Agent of the Stock Offering Offering (Christopher Kane).

41 Includes (i) 34,679 shares of common stock and (ii) 8,670 shares of common stock issuable upon the exercise of the Stock Offering warrants (Christopher M. Johnston).

42 Includes (i) 23,627 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 2,728 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Oppito is affiliated with the Placement Agent of the Stock Offering Offering and the 2012 Common Stock Offering. (Christopher Oppito.).

43 Includes (i) 34,679 shares of common stock, (ii) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants (Clayton A. and Stephanie S., Reed).

44 Includes (i) 69,359 shares of common stock and (ii) 17,340 shares of common stock issuable upon the exercise of the Stock Offering warrants (Clint N. Duty).

45 Includes (i) 3,027 shares of common stock, (ii) 3,027 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 1,514 shares of common stock issuable upon exercise of the Series B warrants (Conor Gilligan).

46 Includes (i) 110,404 shares of common stock, (ii) 27,601 shares of common stock issuable upon exercise of the Stock Offering warrants (Conor Stanley).

47 Includes (i) 3,382 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Bonn is affiliated with the Placement Agent of the 2012 Common Stock Offering (Craig Bonn).

48 Includes (i) 69,359 shares of common stock, (ii) 17,340 shares of common stock issuable upon exercise of the Stock Offering warrants (Daniel P. Wikel).

49 Includes (i) 574 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 1,818 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of

1.65. Mr. Kuhar is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Daniel W. Kuhar.).

50 Includes (i) 20,807 shares of common stock and (ii) 5,202 shares of common stock issuable upon the exercise of the Stock Offering warrants (David A. Kuhar).

51 Includes (i) 144,941 shares of common stock and (ii) 36,235 shares of common stock issuable upon the exercise of the Stock Offering warrants (David Cantwell).

52 Includes (i) 12,109 shares of common stock, (ii) 12,109 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 6,054 shares of common stock issuable upon exercise of the Series B warrants. Davis Hicks may be deemed to be the beneficial owner of the shares of our common stock held by the David Hicks Pension Fund. Mr. Hicks disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (David Hicks Pension Fund).

53 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (David Patterson).

54 Includes (i) 224,902 shares of common stock, (ii) 57,518 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 28,759 shares of common stock issuable upon exercise of the Series B warrants, (iv) and 19,138 shares of common stock issuable upon exercise of the Stock Offering Warrants (David W. Frost).

55 Includes (i) 2,421 shares of common stock, (ii) 2,421 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 1,210 shares of common stock issuable upon exercise of the Series B warrants. David Frost may be deemed to be the beneficial owner of the shares of our common stock held by Frost IRA - Sterne Agee & Leach Inc. C/F David W. Mr. Frost disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (David W. Frost IRA - Sterne Agee & Leach Inc. C/F David W.).

56 Includes (i) 277,440 shares of common stock and (ii) 69,360 shares of common stock issuable upon the exercise of the Stock Offering warrants (Dean L. Fox).

57 Includes (i) 34,130 shares of common stock and (ii) 8,533 shares of common stock issuable upon the exercise of the Stock Offering warrants (Deborah L. Katz).

58 Includes (i) 693,634 shares of common stock and (ii) 173,409 shares of common stock issuable upon the exercise of the Stock Offering warrants (Denis O'Brien)

59 Includes (i) 138,720 shares of common stock, (ii) 34,680 shares of common stock issuable upon exercise of the Stock Offering warrants (Dianne M. Scheck).

60 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Donald K. Coffey).

61 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Douglas A. Alcott).

62 Includes (i) 34,679 shares of common stock and (ii) 8,670 shares of common stock issuable upon the exercise of the Stock Offering warrants (Dougles E. Eckert).

63 Includes (i) 55,024 shares of common stock, (ii) 12,631 shares of common stock issuable upon the exercise of the Stock Offering warrants (Douglas J Amos & Carol A Amos, JTWROS).

64 Includes (i) 54,283 shares of common stock and (ii) 13,571 shares of common stock issuable upon the exercise of the Stock Offering warrants. Douglas R. Holroyd & Jill K. Holroyd may be deemed to be the beneficial owner of the shares of our common stock held by Douglas R. Holroyd & Jill K. Holroyd (JTWROS). Mr. Holroyd and Ms. Holroyd disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Douglas R. Holroyd & Jill K. Holroyd (JTWROS)).

65 Includes (i) 34,3134 shares of common stock and (ii) 8,578 shares of common stock issuable upon the exercise of the Stock Offering warrants (Dr. John M. Ferriter).

66 Includes (i) 76355 shares of common stock, (ii) 18,196 shares of common stock issuable upon exercise of the Stock Offering warrants. Dr. Richard and Anita Matter may be deemed to be the beneficial owner of the shares of our common stock held by Matter, Dr. Richard and Anita (JTWROS). Dr. Richard Matter and Dr. Anita Matter disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Dr. Richard and Anita Matter, (JTWROS)).

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67 Includes (i) 104,039 shares of common stock, (ii) 26,010 shares of common stock issuable upon exercise of the Stock Offering warrants (Earl R. Richardson).

68 Includes (i) 30,273 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants. (Edward C. Moore).

69 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants. Edwin A. Schermerhorn may be deemed to be the beneficial owner of the shares of our common stock held by the Schermerhorn Roth IRA -Sterne Agee & Leach Inc. C/F Edwin A. Mr. Schermerhom disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein. (Edwin A. Schermerhorn Roth IRA -Sterne Agee & Leach Inc. C/F).

70 Includes (i) 174,634 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC (Eitner Family Trust).

71 Includes (i) 34509 shares of common stock, (ii) 8,627 shares of common stock issuable upon exercise of the Stock Offering warrants. Eliana Cardenas Mendez and Roberto Mendez may be deemed to be the beneficial owner of the shares of our common stock held by Mendez, Eliana Cardenas and Roberto (JTWROS). Mr. Mendez and Ms. Mendez disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Eliana Cardenas and Roberto Mendez, (JTWROS)).

72 Includes (i) 12,109 shares of common stock, (ii) 12,109 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 6,054 shares of common stock issuable upon exercise of the Series B warrants (Enguerrand de Ponteves).

73 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Eugene E. Eubank).

74 Includes (i) 287 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Stern is affiliated with the Placement Agent of the Stock Offering (Evan Stern).

75 Includes (i) 23,295 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 10,374 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Smith is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Francis Smith.).

76 Includes (i) 34,679 shares of common stock and (ii) 8,670 shares of common stock issuable upon the exercise of the Stock Offering warrants (Frank Davis).

77 Includes (i) 199,236 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 74,855 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Garnett Trust is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Garnett Trust.).

78 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Garry M. Higdem).

79 Includes (i) 34,679 shares of common stock, (ii) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants (Gary A. Washauer).

80 Includes (i) 41,684 shares of common stock (ii) 9,569 shares of common stock issuable upon the exercise of the Stock Offering warrants (Gene R Carlson & Cynthia L Carlson,

JTWROS).

81 Includes (i) 13,871 shares of common stock and (ii) 3,468 shares of common stock issuable upon the exercise of the Stock Offering warrants (George B. Beam).

82 Includes (i) 30,273 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,137 shares of common stock issuable upon exercise of the Series B warrants. George Elefther & Karin Alexa Elefther may be deemed to be the beneficial owner of the shares of our common stock held by George Elefther & Karin Alexa Elefther (JTWROS). Mr. Elefther and Ms. Elefther disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (George Elefther & Karin Alexa Elefther (JTWROS)).

83 Includes (i) 170,625 shares of common stock and (ii) 42,656 shares of common stock issuable upon the exercise of the Stock Offering warrants (George Elefther IRA).

84 Includes (i) 168,993 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 34,680 shares of common stock issuable upon exercise of the Stock Offering warrants (George M Zelinski).

85 Includes (i) 25,679 shares of common stock, (ii) 12,109 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 6,054 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 3,393 shares of common stock issuable upon exercise of the Stock Offering warrants (Gerhard Plaschka).

86 Includes (i) 83,692 shares of common stock (ii) 19,138 shares of common stock issuable upon the exercise of the Stock Offering warrants (Gonzalo A Salgueiro).

87 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Grant L. Hanby).

88 Includes (i) 26,034 shares of common stock, (ii) 26,034 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 13,017 shares of common stock issuable upon exercise of the Series B warrants. Gregory F. Sullivan & Gene M. Sullivan may be deemed to be the beneficial owner of the shares of our common stock held by Gregory F. Sullivan & Gene M. Sullivan (JTWROS). Gene M. Sullivan and Gregory F. Sullivan disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Gregory F. Sullivan & Gene M. Sullivan (JTWROS)).

89 Includes (i) 82,556 shares of common stock, (ii) 20,639 shares of common stock issuable upon exercise of the Stock Offering warrants (Gregory F., MD and Gene M. Sullivan).

90 Includes (i) 196,411 shares of common stock (ii) 47,569 shares of common stock issuable upon exercise of the Stock Offering warrants. (Halsey, Sterne Agee & Leach Inc C/F Jimmy R. Hasley IRA).

91 Includes (i) 34,679 shares of common stock and (ii) 8,670 shares of common stock issuable upon the exercise of the Stock Offering warrants. Harold O. LaFlash and Greta G. LaFlash may be deemed to be the beneficial owner of the shares of our common stock held by Harold O. LaFlash and Greta G. LaFlash (JTWROS). Mr. LaFlash and Ms. LaFlash disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Harold O. LaFlash and Greta G. LaFlash (JTWROS)).

92 Includes (i) 169,705 shares of common stock and (ii) 42,426 shares of common stock issuable upon the exercise of the Stock Offering warrants. Chris McHugh may be deemed to be the beneficial owner of the shares of our common stock held by Harvest Financial Services Ltd. Mr. McHugh disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Harvest Financial Services Ltd).

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Includes (i) 30,273 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants (Helmut Koehler).

94 Includes (i) 19,980 shares of common stock, (ii) 19,980 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 9,990 shares of common stock issuable upon exercise of the Series B warrants. Davis Hicks may be deemed to be the beneficial owner of the shares of our common stock held by the Hicks Foods Ltd. Mr. Hicks disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Hicks Foods Ltd.).

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95 Includes (i) 18,163 shares of common stock, (ii) 18,163 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 9,081 shares of common stock issuable upon exercise of the Series B warrants. Lawrence Hochman may be deemed to be the beneficial owner of the shares of our common stock held by the Hochman Family LLP . Mr. Hochman disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Hochman Family LLP).

96 Includes (i) 19,988 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 5,318 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Marasa is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Hugh Marasa).

97 Includes (i) 23,607 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 20,438 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Regan is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Hugh Regan).

98 Includes (i) 276,165 shares of common stock, (ii) 75,681 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 37,840 shares of common stock issuable upon exercise of the Series B warrants and (iv) 50,121 shares of common stock issuable upon exercise of the Stock Offering warrants (Ian H.Murray).

99 Includes (i) 211,908 shares of common stock, (ii) 211,909 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 105,954 shares of common stock issuable upon exercise of the Series B warrants. Stephan Herrmann may be deemed to be the beneficial owner of the shares of our common stock held by Immotrend Inc. Stephan Herrmann disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Immotrend Inc.).

100 Includes (i) 166,500 shares of common stock, (ii) 166,500 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 83,250 shares of common stock issuable upon exercise of the Series B warrants. David Sykes may be deemed to be the beneficial owner of the shares of our common stock held by Island Capital Nominees Ltd. David Sykes disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Island Capital Nominees Ltd.).

101 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants (J. Brian Boulter).

102 Includes (i) 97,001 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78 (ii) 873,168 shares of common stock issuable upon exercese of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC and (iii) 31,435 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Ahern is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (James Ahern.).

103 Includes (i) 6,054 shares of common stock, (ii) 6,054 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 3,027 shares of common stock issuable upon exercise of the Series B warrants (James G. Markey and Carolyn L. Markey).

104 Includes (i) 24,218 shares of common stock, (ii) 24,218 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 12,109 shares of common stock issuable upon exercise of the Series B warrants (James L. Payne).

105 Includes (i) 34,679 shares of common stock, (ii) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants (James M. Wimberly).

106 Includes (i) 83,369 shares of common stock from notes conversion (ii) 19,138 shares of common stock issuable upon the exercise of the Stock Offering warrants (James Payne).

107 Includes (i) 531 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Provenzano is affiliated with the Placement Agent of the Stock Offering (James Provenzano).

108 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants. James T. Dietz & Barbara J. Dietz may be deemed to be the beneficial owner of the shares of our common stock held by James T. Dietz & Barbara J. Dietz (JTWROS). Mr. Dietz and Ms. Dietz disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (James T. Dietz & Barbara J. Dietz (JTWROS)).

109 Includes (i) 1,913 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Thompson is affiliated with the Placement Agent of the Stock Offering (James Thompson).

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110 Includes (i) 64,952 shares of common stock, (ii) 30,272 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants (James W. Lees).

111 Includes (i) 69,359 shares of common stock and (ii) 17,340 shares of common stock issuable upon the exercise of the Stock Offering warrants. Jan J. Laskowski & Sofia M. Laskowski may be deemed to be the beneficial owner of the shares of our common stock held by Jan J. Laskowski and Sofia M. Laskowski (JTWROS). Mr. Laskowski and Ms. Laskowski disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Jan J. Laskowski and Sofia M. Laskowski (JTWROS)).

112 Includes (i) 4,238 shares of common stock, (ii) 4,238 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 2,119 shares of common stock issuable upon exercise of the Series B warrants. Jared Sullivan & Shannan Sullivan may be deemed to be the beneficial owner of the shares of our common stock held by Jared Sullivan & Shannan Sullivan. Mr. Sullivan and Ms. Sullivan disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Jared Sullivan & Shannan Sullivan).

113 Includes (i) 15,510 shares of common stock, (ii) 1,816 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 908 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 3,424 shares of common stock issuable upon exercise of the Stock Offering warrants (Jared Sullivan MD).

114 Includes (i) 10,789 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Russo is affiliated with the Placement Agent of the 2012 Common Stock Offering (Jayson Russo).

115 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants (Jeff C. Kleinschmidt).

116 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants (Jeff L. Stevens).

117 Includes (i) 75,032 shares of common stock and (ii) 17,224 shares of common stock issuable upon the exercise of the Stock Offering warrants (Jimmy R. Hasley IRA).

118 Includes (i) 13,871 shares of common stock, (ii) 3,468 shares of common stock issuable upon exercise of the Stock Offering warrants. John Pimpinella and Bernadette Mueller may be deemed to be beneficial owner of the shares of our common stock held by John and Mueller, Bernadette Pimpinella, (JTWROS) Mr. Pimpinella and Ms. Mueller disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (John and Mueller, Bernadette Pimpinella, (JTWROS)).

119 Includes (i) 34,130 shares of common stock, (ii) 8,533 shares of common stock issuable upon exercise of the Stock Offering warrants. John H. Welsh may be deemed to be the beneficial owner of the shares of our common stock held by Welsh, John H. IRA (Sterne Agee & Leach Inc. C/F John H. Welsh Roth IRA). Mr. Welsh disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (John H. Welsh, IRA (Sterne Agee & Leach Inc. C/F John H. Welsh Roth IRA)).

120 Includes (i) 208,079 shares of common stock, (ii) 52,020 shares of common stock issuable upon exercise of the Stock Offering warrants (John L. Sommer IRA, SAL C/F).

121 Includes (i) 33,318 shares of common stock, (ii) 6,054 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 3,027 shares of common stock issuable upon exercise of the Series B warrants and (iv) 6,817 shares of common stock issuable

upon the exercise of the Stock Offering warrants (John M. Duffey).

122 Includes (i) 15,022 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC (John M. Harrington).

123 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants. John Malfer & Toni Malfer may be deemed to be the beneficial owner of the shares of our common stock held by the John Malfer & Toni Malfer (JTWROS). Mr. Malfer and Ms. Malfer disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (John Malfer & Toni Malfer (JTWROS).

124 Includes (i) 34,509 shares of common stock and (ii) 8,627 shares of common stock issuable upon the exercise of the Stock Offering warrants (John W. Eilers, Jr.).

125 Includes (i) 10,334 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 78,867 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC. and (iii) 2,404 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Eitner is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (John-Paul Eitner.).

126 Includes (i) 30,272 shares of common stock, (ii) 30,272 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants (Jonathan Smith).

127 Includes (i) 34,509 shares of common stock and (ii) 8,627 shares of common stock issuable upon the exercise of the Stock Offering warrants (Jorge Borbolla).

128 Includes (i) 4,306 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Fedorko is affiliated with the Placement Agent of the Stock Offering (Joseph Fedorko.).

129 Includes (i) 3,027 shares of common stock, (ii) 3,027 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 1,513 shares of common stock issuable upon exercise of the Series B warrants (Joseph P. Acquavella).

130 Includes (i) 5,550 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Rozof is affiliated with the Placement Agent of the Stock Offering (Joseph Rozof).

131 Includes (i) 20,807 shares of common stock, (ii) 5,202 shares of common stock issuable upon exercise of the Stock Offering warrants (Joseph T. Oppito).

132 Includes (i) 9,081 shares of common stock, (ii) 9,081 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 4,540 shares of common stock issuable upon exercise of the Series B warrants. (Justin McKenna).

133 Includes (i) 84,495 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 17,340 shares of common stock issuable upon exercise of the Stock Offering warrants (Keith A. Zar).

134 Includes (i) 68,260 shares of common stock and (ii) 17,065 shares of common stock issuable upon the exercise of the Stock Offering warrants (Ken R. Klimitchek).

135 Includes (i) 83,369 shares of common stock (ii) 19,138 shares of common stock issuable upon the exercise of the Stock Offering warrants (Kenneth G. Williamson).

136 Includes (i) 69,359 shares of common stock and (ii) 17.340 shares of common stock issuable upon the exercise of the Stock Offering warrants (Kenneth N. Larsen Trust U/A/D 9/25/09, Kenneth N. Larsen Trustee).

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Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Kerston Coombs).

138 Includes (i) 14,531 shares of common stock, (ii) 14,531 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,265 shares of common stock issuable upon exercise of the Series B warrants (Kevin J. Poor).

139 Includes (i) 6,054 shares of common stock, (ii) 6,054 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 3,027 shares of common stock issuable upon exercise of the Series B warrants (Kevin Lynch).

140 Includes (i) 22,913 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. O'Connor is affiliated with the Placement Agent of the Stock Offering (Kevin O'Connor.).

141 Includes (i) 153,051 shares of common stock, (ii) 36,478 shares of common stock issuable upon exercise of the Stock Offering warrants (Kevin P. McCarthy).

142 Includes (i) 12,477 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 45,067 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC. and (iii) 5,391 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Wilson is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering. (Kevin R. Wilson).

143 Includes (i) 9,081 shares of common stock, (ii) 9,081 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 4,540 shares of common stock issuable upon exercise of the Series B warrants. Kimberly J. Macurdy may be deemed to be the beneficial owner of the shares of our common stock held by Macurdy IRA - Sterne Agee & Leach Inc. C/F Kimberly J. Ms. Macurdy disclaims beneficial ownership of such shares, except to the extent of her pecuniary interest therein (Kimberly J. Macurdy IRA - Sterne Agee & Leach Inc. C/F).

144 Includes (i) 41,846 shares of common stock (ii) 9,569 shares of common stock issuable upon the exercise of the Stock Offering warrants (Konetzni JR JT TEN, Shirley A Konetzini & Albert H).

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145 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants. Walter J. Lachewitz Jr. may be deemed to be the beneficial owner of the shares of our common stock held by Lachewitz - Stern Agee & Leach Inc. C/F Walter J. Jr. IRA. Walter J. Lachewitz Jr. disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Lachewitz - Stern Agee & Leach Inc. C/F Walter J. Jr. IRA).

146 Includes (i) 62,958 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 23,654 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Laidlaw Holdings PLC is comprised of numerous beneficial owners and any single party may be deemed to be the beneficial owner of the shares of our common stock held by Laidlaw Holdings PLC. Laidlaw Holdings PLC disclaims beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein. Laidlaw Holdings PLC is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering. (Laidlaw Holdings PLC.).

147 Includes (i) 13,570 shares of common stock, (ii) 3,393 shares of common stock issuable upon exercise of the Stock Offering warrants (Lance Ziaks & Janet Ziaks JTWROS).

148 Includes (i) 68,260 shares of common stock and (ii) 17,065 shares of common stock issuable upon the exercise of the Stock Offering warrants. Ralph W. Kettell may be deemed to be the beneficial owner of the shares of our common stock held by Lark Enterprises, Ltd. Ralph W. Kettell disclaims beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Lark Enterprises, Ltd.).

149 Includes (i) 50,322 shares of common stock, (ii) 8,476 shares of common stock issuable upon the exercise of the Series A warrants (iii) 4,238 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 9,569 shares of common stock issuable upon the exercise of the Stock Offering warrants (Larry G. Majerus).

150 Includes (i) 24,218 shares of common stock, (ii) 24,218 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 12,109 shares of common stock issuable upon exercise of the Series B warrants (Laurence B. Jacobs).

151 Includes (i) 15,022 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC (Lindsay Aranha).

152 Includes (i) 68,260 shares of common stock, (ii) 17,065 shares of common stock issuable upon exercise of the Stock Offering warrants. Jon H. Lytle and Carrie M. Lytle may be deemed to be the beneficial owner of the shares of our common stock held by Lytle, Jon H. and Carrie M. (JTWROS). Mr. Lytle and Ms. Lytle disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Lytle, Jon H. and Carrie M. (JTWROS)).

153 Includes (i) 15,064 shares of common stock (ii) 3,445 shares of common stock issuable upon exercise of the Stock Offering warrants (Mabie JTWROS, Gary J & Janelle L).

154 Includes (i) 6,054 shares of common stock, (ii) 6,054 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 3,027 shares of common stock issuable upon exercise of the Series B warrants (Maree Casatelli).

155 Includes (i) 9,081 shares of common stock, (ii) 9,081 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 4,540 shares of common stock issuable upon exercise of the Series B warrants. Maree Casatelli may be deemed to be the beneficial owner of the shares of our common stock held by Casatelli SEP IRA - Sterne Agee & Leach Inc. C/F Maree. Ms. Casatelli disclaims beneficial ownership of

such shares, except to the extent of his or her pecuniary interest therein (Maree Casatelli SEP IRA - Sterne Agee & Leach Inc. C/F Maree).

156 Includes (i) 30,272 shares of common stock, (ii) 30,272 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants. Mark A. Maki & Sara L. Maki may be deemed to be the beneficial owner of the shares of our common stock held by the Mark A. Maki & Sara L. Maki (JTWROS). Mr. Maki and Ms. Maki disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Mark A. Maki & Sara L. Maki (JTWROS)).

157 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Mark C. Jasek).

158 Includes (i) 90,818 shares of common stock, (ii) 90,818 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 45,409 shares of common stock issuable upon exercise of the Series B warrants. Mr. Suwyn may be deemed to be the beneficial owner of the shares of our common stock held by the Mark Suwyn Roth IRA - Sterne Agee & Leach Inc. C/F. Mr. Suwyn disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Mark Suwyn Roth IRA - Sterne Agee & Leach Inc. C/F).

159 Includes (i) 37,454 shares of common stock, (ii) 9,364 shares of common stock issuable upon exercise of the Stock Offering warrants (Marvin S. Rosen).

160 Includes (i) 97,001 shares of common stock issuable upon exercise of the warrants at an exercise price of 0.78 (ii) 698,534 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC and (iii) 31,435 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Eitner is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Matthew Eitner).

161 Includes (i) 69,359 shares of common stock, (ii) 17,340 shares of common stock issuable upon exercise of the Stock Offering warrants (Matthew Reid).

162 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants. Gary D. Matura and Margaret I. Curtin Matura may be deemed to be the beneficial owners of the shares of our common stock held by the Matura Family Trust UA 05-26-1998. Gary D. Matura and Margaret I. Curtin Matura disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Matura Family Trust UA 05-26-1998).

163 Includes (i) 2,145 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Ahern is affiliated with the Placement Agent of the 2012 Common Stock Offering (Michael Ahern).

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164 Includes (i) 318,440 shares of common stock, (ii) 75,681 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 37,840 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 60,690 shares of common stock issuable upon the exercise of the Stock Offering warrants. Michael B. Carroll & Sheila J. Carroll may be deemed to be the beneficial owner of the shares of our common stock held by Michael B. Carroll & Sheila J. Carroll (JTWROS). Mr. Carroll and Ms. Carroll disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Michael B. Carroll & Sheila J. Carroll (JTWROS)).

165 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Michael D. Watson).

166 Includes (i) 34,679 shares of common stock, (ii) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants (Michael E. Whitley).

167 Includes (i) 90,550 shares of common stock, (ii) 21,191 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 10,595 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 17,340 shares of common stock issuable upon the exercise of the Stock Offering warrants . Michael Engdall & Susan Engdall may be deemed to be the beneficial owner of the shares of our common stock held by Michael Engdall & Susan Engdall (JTWROS). Mr. Engdall and Ms. Engdall disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Michael Engdall & Susan Engdall (JTWROS)).

168 Includes (i) 71,888 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 10,404 shares of common stock issuable upon the exercise of the Stock Offering warrants. Michael K. Barber & Julia Barber may be deemed to be the beneficial owner of the shares of our common stock held by Michael K. Barber & Julia Barber (JTWROS). Mr. Barber and Ms. Barber disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Michael K. Barber & Julia Barber (JTWROS)).

169 Includes (i) 27,743 shares of common stock, (ii) 6,936 shares of common stock issuable upon exercise of the Stock Offering warrants (Michael L. Turner).

170 Includes (i) 13,759 shares of common stock and (ii) 3,440 shares of common stock issuable upon the exercise of the Stock Offering warrants (Michael M. Hart)

171 Includes (i) 21,156 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 78,867 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC. and (iii) 4,256 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Murray is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Michael Murray.).

172 Includes (i) 34,679 shares of common stock and (ii) 8,670 shares of common stock issuable upon the exercise of the Stock Offering warrants (Michael R. Chambers).

173 Includes (i) 41,176 shares of common stock, (ii) 10,294 shares of common stock issuable upon exercise of the Stock Offering warrants (Michael Stanley).

174 Includes (i) 34130 shares of common stock, (ii) 8,533 shares of common stock issuable upon exercise of the Stock Offering warrants. Howard S. Ziment may be deemed to be the beneficial owner of the shares of our common stock held by Minta Group LLC. Mr. Ziment disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Minta Group LLC).

175 Includes (i) 50,765 shares of common stock, (ii) 9,081 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 4,540 shares of common stock issuable upon exercise of the Series B warrants and (iv)

9,569 shares of common stock issuable upon exercise of the Stock Offering warrants (Nabil M. Yazgi).

176 Includes (i) 9,081 shares of common stock, (ii) 9,081 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 4,540 shares of common stock issuable upon exercise of the Series B warrants. Nabil Yazgi may be deemed to be the beneficial owner of the shares of our common stock held by the Nabil Yazgi MD PA 401(K) Profit Sharing Plan and Trust. Mr. Yazgi disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Nabil Yazgi MD PA 401(K) Profit Sharing Plan and Trust).

177 Includes (i) 3,027 shares of common stock, (ii) 3,027 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 1,513 shares of common stock issuable upon exercise of the Series B warrants. Nabil Yazgi may be deemed to be the beneficial owner of the shares of our common stock held by the Nabil Yazgi MD PA Cash Balance Plan & Trust 12-28-2008. Mr. Yazgi disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Nabil Yazgi MD PA Cash Balance Plan & Trust 12-28-2008).

178 Includes (i) 909 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Gupta is affiliated with the Placement Agent of the 2012 Common Stock Offering (Nicholas Gupta).

179 Includes (i) 455 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Maddren is affiliated with the Placement Agent of the 2012 Common Stock Offering (Patrick Maddren).

180 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Patrick Thomas).

181 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants. Paul A. Wildberger & Janice Wildberger may be deemed to be the beneficial owner of the shares of our common stock held by Paul A. Wildberger & Janice Wildberger (JTWROS). Mr. Wildberger and Ms. Wildberger disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Paul A. Wildberger & Janice Wildberger (JTWROS)).

182 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Peter H. Colettis).

183 Includes (i) 1,637 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Silverman is affiliated with the Placement Agent of the 2012 Common Stock Offering.

184 Includes (i) 1,637 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Silverman is affiliated with the Placement Agent of the 2012 Common Stock Offering.

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185 Includes (i) 287 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Malone is affiliated with the Placement Agent of the Stock Offering (Peter Malone).

186 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Philip Stephenson).

187 Includes (i) 102,391 shares of common stock and (ii) 25,598 shares of common stock issuable upon the exercise of the Stock Offering warrants (PhillipTodd Herndon).

188 Includes (i) 12,109 shares of common stock, (ii) 12,109 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 6,054 shares of common stock issuable upon exercise of the Series B warrants (Rafael Penunuri).

189 Includes (i) 18,163 shares of common stock, (ii) 18,163 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 9,081 shares of common stock issuable upon exercise of the Series B warrants (Raja Appachi).

190 Includes (i) 41,684 shares of common stock, (ii) 9,569 shares of common stock issuable upon the exercise of the Stock Offering warrants (Randall L & Kathy S Payne, JTWROS).

191 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants. Randy Payne may be deemed to be the beneficial owner of the shares of our common stock held by the Payne IRA - Sterne Agee & Leach Inc. C/F Randy. Mr. Payne disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Randy Payne IRA - Sterne Agee & Leach Inc. C/F Randy).

192 Includes (i) 33,627 shares of common stock, (ii) 13,305 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 6,652 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 5,081 shares of common stock issuable upon exercise of the Stock Offering warrants (Ray Sinnott).

193 Includes (i) 17,642 shares of common stock, (ii) 4,411 shares of common stock issuable upon exercise of the Stock Offering warrants. Ray Sinnott may be deemed to be the beneficial owner of the shares of our common stock held by the Ray Sinnott Pension Fund. Mr. Sinnott disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Ray Sinnott Pension Fund).

194 Includes (i) 30,273 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants. Clayton A Reed & Stephanie S. Reed may be deemed to be the beneficial owner of the shares of our common stock held by the Reed Family Trust DTD 06-24-1999 Clayton A Reed & Stephanie S. Reed TTEES . Mr. Reed and Ms. Reed disclaims beneficial ownership of such shares, except to the extent of his or hers pecuniary interest therein (Reed Family Trust DTD 06-24-1999 Clayton A Reed & Stephanie S. Reed TTEES).

195 Includes (i) 274,509 shares of common stock and (ii) 68,627 shares of common stock issuable upon the exercise of the Stock Offering warrants (Rex A. Jones).

196 Includes (i) 748,124 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants (iv) 171,895 shares of common stock issuable upon exercise of the Stock Offering warrants (Richard A. Levine).

197 Includes (i) 22,913 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Brewster is affiliated with the Placement

Agent of the Stock Offering (Richard Brewster.).

198 Includes (i) 9,081 shares of common stock, (ii) 9,081 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 4,540 shares of common stock issuable upon exercise of the Series B warrants (Richard Burgess).

199 Includes (i) 3,136 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Buttine is affiliated with the Placement Agent of the 2012 Common Stock Offering (Richard Buttine).

200 Includes (i) 21,156 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 225,334 shares of common stock issuable upon exercise of the warrants pursuant to the transaction management agreement with Jamess Capital Group, LLC. and (iii) 4,256 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Michalski is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Richard G. Michalski).

201 Includes (i) 13,871 shares of common stock and (ii) 3,468 shares of common stock issuable upon the exercise of the Stock Offering warrants (Richard L. Herweck).

202 Includes (i) 7,318 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Jobanputra is affiliated with the Placement Agent of the 2012 Common Stock Offering (Rikin Jobanputra).

203 Includes (i) 41,336 shares of common stock, (ii) 9,569 shares of common stock issuable upon exercise of the Stock Offering warrants (Rippee Mineral Management LLC).

204 Includes (i) 19,988 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (II) 15,470 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Bonaventura is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Robert Bonaventura.).

205 Includes (i) 138,720 shares of common stock and (ii) 34,680 shares of common stock issuable upon the exercise of the Stock Offering warrants (Robert Dunn).

206 Includes (i) 277,440 shares of common stock and (ii) 69,360 shares of common stock issuable upon the exercise of the Stock Offering warrants (Robert A. Krauch).

207 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Robert Hair).

208 Includes (i) 41,846 shares of common stock (ii) 9,569 shares of common stock issuable upon the exercise of the Stock Offering warrants (Robert J Laubenthal).

209 Includes (i) 1,665 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. LeBoyer is affiliated with the Placement Agent of the Stock Offering (Robert LeBoyer.).

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210 Includes (i) 34,679 shares of common stock and (ii) 8,670 shares of common stock issuable upon the exercise of the Stock Offering warrants (Robert N. Blank).

211 Inclues (i) 2,255 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Rotunno is affiliated with the Placement Agent of the 2012 Common Stock Offering. (Robert Rotunno).

212 Includes (i) 34,679 shares of common stock, (ii) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants (Robert T. Stapell).

213 Includes (i) 148,695 shares of common stock, (ii) 45,409 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 22,704 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 25,822 shares of common stock issuable upon the exercise of the Stock Offering warrants. (Roger Conan).

214 Includes (i) 68,470 shares of common stock and (ii) 17,188 shares of common stock issuable upon the exercise of the Stock Offering warrants (Roger K. Cady R/O IRA).

215 Includes (i) 276,314 shares of common stock and (ii) 69,079 shares of common stock issuable upon the exercise of the Stock Offering warrants (Ron D. Craig).

216 Includes (i) 7,090 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Zuckerman is affiliated with the Placement Agent of the 2012 Common Stock Offering. (Ron Zuckerman).

217 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Ronald J. Woodward).

218 Includes (i) 48,551 shares of common stock, (ii) 12,138 shares of common stock issuable upon exercise of the Stock Offering warrants (Ronald Soicher).

219 Includes (i) 18,747 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 10,374 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Turcotte is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Ryan Turcotte).

220 Includes (i) 64,746 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 57,212 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Seth is affiliated with the Placement Agent of the Stock Offering Offering, the 2012 Common Stock Offering and is also a Director of the Company (Sandesh Seth.).

221 Includes (i) 39,413 shares of common stock, (ii) 12,109 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 6,054 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 6,826 shares of common stock issuable upon exercise of the Stock Offering warrants (Sandra F. Tomlinson).

222 Includes (i) 50,021 shares of common stock, (ii) 11,483 shares of common stock issuable upon exercise of the Stock Offering warrants (Schneider, STERNE AGEE & LEACH INC C/F Pat Schneider IRA).

223 Includes (i) 34,679 shares of common stock and (ii) 8,670 shares of common stock issuable upon the exercise of the Stock Offering warrants (Scott L. Byer).

224 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants. Alexander Sepulveda may be deemed to be the beneficial owner of the shares of our common stock held by the Sepulveda IRA - Sterne Agee & Leach Inc. C/F Alexander. Mr. Sepulveda disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein

(Sepulveda IRA - Sterne Agee & Leach Inc. C/F Alexander),

225 Includes (i) 13,871 shares of common stock, (ii) 3,468 shares of common stock issuable upon exercise of the Stock Offering warrants (Sharon M. Smith).

226 Includes (i) 41,082 shares of common stock and (ii) 10,271 shares of common stock issuable upon the exercise of the Stock Offering warrants (Simon Guscott).

227 Includes (i) 832 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Shah is affiliated with the Placement Agent of the Stock Offering (Sohin Shah.).

228 Includes (i) 6,785 shares of common stock, (ii)1,696 shares of common stock issuable upon exercise of the Stock Offering warrants (Srinivasa Rajan).

229 Includes (i) 41,411 shares of common stock, (ii) 10,353 shares of common stock issuable upon exercise of the Stock Offering warrants . Stephen Park and Tracy Park may be deemed to be beneficial owner of the shares of our common stock held by Park, Stephen and Tracy (JTWROS). Mr. Park and Ms. Park disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Stephen and Tracy Park, (JTWROS)).

230 Includes (i) 20,807 shares of common stock and (ii) 5,202 shares of common stock issuable upon the exercise of the Stock Offering warrants (Stephen Fischgrund).

231 Includes (i) 77,535 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 13,263 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Hamilton is affiliated with the Placement Agent of the Stock Offering Offering and the 2012 Common Stock Offering. (Stephen Hamilton).

232 Includes (i) 35,691 shares of common stock, (ii) 8,923 shares of common stock issuable upon exercise of the Stock Offering warrants. JB Trahern and/or Ann Trahern may be deemed to be the beneficial owner of the shares of our common stock held by the Sterne Agee & Leach Inc. C/F JB Trahern Bene Owner Ann Trahern DCSD IRA. JB Trahern and/or Ann Trahern disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interst therein (Sterne Agee & Leach Inc. C/F JB Trahern Bene Owner Ann Trahern DCSD IRA).

233 Includes (i) 30,273 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants. Steven De Decker & Diop Diatou may be deemed to be the beneficial owner of the shares of our common stock held by Steven De Decker & Diop Diatou (JTWROS). Mr. De Decker and Ms. Diatou disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Steven De Decker & Diop Diatou (JTWROS)).

234 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Steven K. Nelson).

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235 Includes (i) 13,694 shares of common stock, (ii) 3,424 shares of common stock issuable upon exercise of the Stock Offering warrants (Steven W. and Judith L. Poe).

236 Includes (i) 6,785 shares of common stock, (ii)1,696 shares of common stock issuable upon exercise of the Stock Offering warrants. Gregory F. Sullivan may be deemed to be the beneficial owner of the shares of our common stock held by the Sullivan II IRA - Sterne Agee & Leach Inc. C/F Gregory F. Mr. Sullivan disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Sullivan II IRA - Sterne Agee & Leach Inc. C/F Gregory F.).

237 Includes (i) 12,109 shares of common stock, (ii) 12,109 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 6,054 shares of common stock issuable upon exercise of the Series B warrants (Susan H. Lu).

238 Includes (i) 101,105 shares of common stock, (ii) 33,285 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 16,642 shares of common stock issuable upon exercise of the Series B warrants, and (iv)16,955 shares of common stock issuable upon exercise of the Stock Offering warrants. Ray Sinott may be deemed to be the beneficial owner of the shares of our common stock held by Syntec Scientific LTD. Mr. Sinott disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Syntec Scientific LTD).

239 Includes (i) 13,725 shares of common stock, (ii) 3,431 shares of common stock issuable upon exercise of the Stock Offering warrants. Thomas Murray and Lillian Murray may be deemed to be the beneficial owner of the shares of our common stock held by Murray, Thomas and Lillian (JTWROS). Mr. Murray and Ms. Murray disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Thomas and Lillian Murray, (JTWROS)).

240 Includes (i) 41,684 shares of common stock, (ii) 9,569 shares of common stock issuable upon exercise of the Stock Offering warrants. (Thomas C. Pugh).

241 Includes (i) 113,965 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants and (iv) 19,138 shares of common stock issuable upon exercise of the Stock Offering warrants (Thomas G. Hoffman).

242 Includes (i) 56,820 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants and (iv) 9,569 shares of common stock issuable upon exercise of the Stock Offering warrants. Thomas J. Moore & Cathleen Moore may be deemed to be the beneficial owner of the shares of our common stock held by the Thomas J. Moore & Cathleen Moore (JTWROS). Mr. Moore and Ms. Moore disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Thomas J. Moore & Cathleen Moore (JTWROS)).

243 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Thomas N. Metz).

244 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants (Thomas Turley).

245 Includes (i) 30,273 shares of common stock, (ii) 30,273 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 15,136 shares of common stock issuable upon exercise of the Series B warrants (Timothy A. Kippenhan).

246 Includes (i) 3,444 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 2,727 shares of common stock issuable upon

exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Mr. Behr is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Timothy C. Behr).

247 Includes (i) 76,295 shares of common stock, (ii) 19,074 shares of common stock issuable upon exercise of the Stock Offering warrants (Timothy E. Lemaster).

248 Includes (i) 34,679 shares of common stock, (ii) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants. Timothy J. Pellegrini and Catherine A. Pellegrini may be deemed to be beneficial owner of the shares of our common stock held by Pellegrini, Timothy J. and Catherine A. (JTWROS) Mr. Pellegrini and Ms. Pellegrini disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Pellegrini, Timothy J. and Catherine A. (JTWROS)).

249 Includes (i) 41,082 shares of common stock and (ii) 10,271 shares of common stock issuable upon the exercise of the Stock Offering warrants. Timothy J. Kane and Annette K. Kane may be deemed to be the beneficial owner of the shares of our common stock held by Timothy J. Kane and Annette K. Kane (JTWROS). Mr. Kane and Ms. Kane disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (Timothy J. Kane and Annette K. Kane).

250 Includes (i) 34,679 shares of common stock, (ii) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants (Timothy J. Rinker).

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251 Includes (i) 65,891 shares of common stock and (ii) 16,473 shares of common stock issuable upon the exercise of the Stock Offering warrants (Timothy P. Johnston).

252 Includes (i) 67,979 shares of common stock, (ii) 33,300 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 16,650 shares of common stock issuable upon exercise of the Series B warrants, and (iv) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants (Timothy Wieghaus).

253 Includes (i) 71,497 shares of common stock, (ii) 3,027 shares of common stock issuable upon the exercise of the Series A warrants, (iii) 1,513 shares of common stock issuable upon exercise of the Series B warrants, (iv) 17,118 shares of common stock issuable upon exercise of the Stock Offering warrants (Tracy N. Poe).

254 Includes (i) 40,712 shares of common stock, (ii) 10,178 shares of common stock issuable upon the exercise of the Stock Offering warrants (Tracy Poe (Sterne Agee & Leach)

255 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (Uday Dandamudi).

256 Includes (i) 412,784 shares of common stock, (ii) 103,196 shares of common stock issuable upon exercise of the Stock Offering warrants. Xiongwei Ju may be deemed to be the beneficial owner of the shares of our common stock held by Variety Investments Limited. Xiongwei Ju disclaims the beneficial ownership of such shares, except to the extent of his pecuniary interest therein (Variety Investments Limited).

257 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants. Brian M. Miller may be deemed to be the beneficial owner of the shares of our common stock held by Velcro LLC. Brian M. Miller disclaims beneficial ownership of such shares, except to the extent of her pecuniary interest therein (Velcro LLC).

258 Includes (i) 832 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. Mr. Moras is affiliated with the Placement Agent of the Stock Offering (Vinod Moras.).

259 Includes (i) 26,678 shares of common stock and (ii) 6,124 shares of common stock issuable upon the exercise of the Stock Offering warrants (Willard L Simons).

260 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants Willard L. Simons may be deemed to be the beneficial owner of the shares of our common stock held by the Simons IRA - Sterne Agee & Leach Inc. C/F Willard L. Mr. Simons disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein. (Willard L. Simons IRA - Sterne Agee & Leach Inc. C/F).

261 Includes (i) 34,679 shares of common stock, (ii) 8,670 shares of common stock issuable upon exercise of the Stock Offering warrants. William A. Valka and Barbara B. Valka may be deemed to be the beneficial owner of the shares of our common stock held by Valka, William A. and Barbara B. (JTWROS). Mr. Valka and Ms. Valka disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (William A. and Barbara B. Valka, (JTWROS)).

262 Includes (i) 60,545 shares of common stock, (ii) 60,545 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 30,272 shares of common stock issuable upon exercise of the Series B warrants (William H. Hieronymus).

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Includes (i) 12,109 shares of common stock, (ii) 12,109 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 6,054 shares of common stock issuable upon exercise of the Series B warrants. William J. Diamond & Andrea Sullivan may be deemed to be the beneficial owner of the shares of our common stock held by William J. Diamond & Andrea Sullivan (JTWROS). Mr. Diamond and Ms. Sullivan disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (William J. Diamond & Andrea Sullivan (JTWROS)).

264 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants. William L. Lane & Leanne Lane may be deemed to be the beneficial owner of the shares of our common stock held by the William L. Lane & Leanne Lane (JTWROS). Mr. Lane and Ms. Lane disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein (William L. Lane & Leanne Lane (JTWROS)).

265 Includes (i) 34,679 shares of common stock and (ii) 8,670 shares of common stock issuable upon the exercise of the Stock Offering warrants (William Wade Brawley).

266 Includes (i) 15,136 shares of common stock, (ii) 15,136 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 7,568 shares of common stock issuable upon exercise of the Series B warrants (William Woodford).

267 Includes (i) 138,720 shares of common stock, (ii) 34,680 shares of common stock issuable upon exercise of the Stock Offering warrants. Patricia White and/or William Wilson III may be deemed to be the beneficial owner of the shares of our common stock held by Wilson, William, III and Wilson, Patricia White COTTEE of The Wilson Family Restated Living Trust UTA dtd 04/2004. Mr. Wilson and Ms. White disclaim beneficial ownership of such shares, except to the extent of his or her pecuniary interest therein. (Wilson, William, III and Wilson, Patricia White COTTEE of The Wilson Family Restated Living Trust UTA dtd 04/2004).

268 Includes (i) 9,990 shares of common stock, (ii) 9,990 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 4,995 shares of common stock issuable upon exercise of the Series B warrants (Wojciech Rybacki).

269 Includes (i) 13,054 shares of common stock issuable upon exercise of the placement agent warrants at an exercise price of 0.78. (ii) 7,054 shares of common stock issuable upon exercise of the 2012 Common Stock placement agent warrants at an exercise price of 1.65. Ms. Zhou is affiliated with the Placement Agent of the Stock Offering and the 2012 Common Stock Offering (Xiaowei Zhou.).

270 Includes (i) 18,163 shares of common stock, (ii) 18,163 shares of common stock issuable upon the exercise of the Series A warrants, and (iii) 9,081 shares of common stock issuable upon exercise of the Series B warrants (Yogesh Desai).

Except as disclosed in the table above, to our knowledge, none of the selling stockholders or beneficial owners:

has had a material relationship with us other than as a stockholder at any time within the past three years;

has ever been one of our officers or directors or an officer or director of our affiliates; or

are broker-dealers or affiliated with broker-dealers.

With respect to those selling stockholders noted above who are or were affiliated with registered broker-dealers, each has represented to us that the shares being registered for resale were purchased in the ordinary course of business and, at the time of purchase, such selling stockholder had no agreements or understandings, directly or indirectly, with any

person to distribute the shares.

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DESCRIPTION OF BUSINESS

Business Overview

We are a biopharmaceutical company focused on the $50 billion market for cancer drugs. Our most advanced products are Actimab™-A, an antibody-drug construct containing actinium 225 (Ac-225), currently in human clinical trials for acute myeloid leukemia (AML) and Iomab™-B, an antibody-drug construct containing iodine 131 (I-131), used in myeloconditioning for hematopoietic stem cells transplantation (HSCT) in various indications. The Company is currently designing a trial which the Company intends to submit for registration approval in HSCT in the settings of refractory and relapsed acute myeloid leukemia in older patients. The Company is developing its cancer drugs using its expertise in radioimmunotherapy. In addition, the Ac-225 based drugs development relies on the patented Alpha Particle Immunotherapy Technology (APIT) platform technology co-developed with Memorial Sloan- Kettering Cancer Center, a related institution. The APIT technology couples monoclonal antibodies (mAb) with extremely potent but comparatively safe alpha particle emitting radioactive isotopes, in particular actinium 225 and bismuth 213. The final drug construct is designed to specifically target and kill cancer cells while minimizing side effects. The Company intends to develop a number of products for different types of cancer and derive revenue from partnering relationships with large pharmaceutical companies and/or direct sales of its products in specialty markets in the U.S.

Our Corporate History and Background

We were formed as a Nevada corporation on October 6, 1997, originally under the name Zurich U.S.A., Inc. On July 10, 2006, we changed our name to Cactus Ventures, Inc. and began pursuing our business of marketing sunglasses. The Company encountered numerous problems with various vendors and ceased its operations. The Company shifted its efforts to seeking a business combination opportunity with a business entity, and negotiated a merger of a target company into the Company. Upon ceasing its operations, the Company was considered a “blank check” or “Shell” company as such term is defined under the Securities Act.

Upon completing the Share Exchange (as defined below), the Company ceased being considered a “blank check” or “Shell” company and is now a clinical-stage biopharmaceutical company developing certain cancer treatments.

Acquisition of Actinium

On December 28, 2012, Actinium Pharmaceuticals, Inc. (“Actinium”) completed a share exchange with Cactus, whereby Cactus acquired 21% of the issued and outstanding capital stock of Actinium from the shareholders of Actinium (the “Actinium Shareholders”) in exchange for the issuance of 4,309,015 shares of Common Stock to the Actinium Shareholders (the “Share Exchange”). Cactus has a class of securities registered under the Exchange Act of 1934 but its Common Stock is not registered under the Securities Act of 1933. As part of the Share Exchange, Actinium paid $250,000 to the shareholders of Cactus before the consummation of the Share Exchange.

The Share Exchange was treated as a recapitalization effected through a share exchange, with Actinium as the accounting acquirer and the Cactus the accounting acquiree. Unless the context suggests otherwise, when we refer in this Registration Statement to business and financial information for periods prior to the consummation of the Share Exchange, we are referring to the business and financial information of Actinium.

Effective following the expiration of the ten day period following the mailing of the information statement required by Rule 14f-1 under the Exchange Act, Diane S. Button resigned from her position as member of the Board of Directors of the Company. Effective upon the closing of the Share Exchange, Diane S. Button resigned as an officer of the Company. Also effective upon the closing of the Share Exchange, Jack V. Talley was appointed to our Board of Directors. Effective as of the expiration of the ten day period following the mailing of the information statement

required by Rule 14f-1 under the Exchange Act Dr. Rosemary Mazanet, David Nicholson, Sandesh Seth and Sergio Traversa were appointed to our Board of Directors. In addition, our Board of Directors appointed Jack V. Talley to serve as our President and Chief Executive Officer, Dragan Cicic to serve as our Chief Operating Officer and Chief Medical Officer, and Enza Guagenti to serve as our Chief Financial Officer, effective immediately upon the closing of the Share Exchange. On February 28, 2013, Mr. Talley resigned as the President and Chief Executive Officer, and Director of the Company and Actinium. On March 1, 2013, the Board of Directors of the Company unanimously approved the appointment of Sergio Traversa as the Company's interim President and Chief Executive Officer. Dr. Traversa is also currently a member of the Board of the Company. On March 9, 2013, Ms. Guagenti resigned as the Chief Financial Officer of the Company and Actinium. On March 11, 2013, the Board of Directors of the Company unanimously approved the appointment of Sergio Traversa as the Company's interim Chief Financial Officer. The Board is actively looking for a candidate to fill the Chief Executive Officer and Chief Financial Officer positions of the Company. On March 13, 2013, the Board approved the appointment of Brio Financial Group as the Company's interim Controller, responsible for the Company's treasury and accounting functions.

As a result of the Share Exchange, Actinium assumed the business and operations of Actinium. Cactus plans to change its name to more accurately reflect its new business operations. As Cactus is a "reporting company" under the Exchange Act of 1934, it is required to file periodic filings with the SEC, which include Actinium's quarterly and annual financial information.

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On March 11, 2013, Actinium continued its Share Exchange with Cactus, whereby Cactus acquired an additional 36% of the issued and outstanding capital stock of Actinium from the Actinium Shareholders in exchange for the issuance of 7,344,390 shares of Common Stock to the Actinium Shareholders. As of March 11, 2013, the Company has acquired a total of 34,995,211, or approximately 55.5%, of the issued and outstanding equity securities of Actinium. The Company intends to continue to exchange its shares of common stock for shares of Actinium held by the remaining Actinium Shareholders.

Corporate History of Actinium

Actinium was incorporated in 2000 in the state of Delaware. Until the Share Exchange, Actinium was a clinical-stage, privately held biopharmaceutical company with:

Two clinical-stage products, Iomab.-B and Actimab.-A, in development for blood borne cancers;
Preclinical data in additional cancer indications;
A proprietary technology platform for novel radioimmunotherapy cancer treatments; and
A proprietary process for manufacturing of the alpha particle emitting radioactive isotope actinium 225 (Ac-225).

Iomab.-B has completed a Phase I/II design trial as a preparatory regimen in conjunction with fludarabine and reduced intensity radiation conditioning in patients who are ineligible for standard mycloablative conditioning for hematopoietic stem cell transplantation (HSCT) and the Company expects it to enter a regulatory approval trial in 2013, subject to input from the FDA concerning the design and conduct of a pivotal trial. Actimab.-A is currently in a Phase I/II trial in newly diagnosed elderly acute myeloid leukemia (AML). In addition, using its patented Alpha Particle Immunotherapy Technology (APIT) platform and via its collaboration with the Memorial Sloan Kettering Cancer Center (MSKCC), the Company has preclinical data on potential drug candidates in several other cancer indications and expects to further develop these into clinical stage drug candidates.

Actinium has one wholly owned subsidiary, MedActinium, Inc., a Delaware corporation, which is party to certain isotope related licenses and contracts on which the Company relies.

Upon Actinium's formation in 2000, it acquired Pharmactinium, Inc. and MedActinium, Inc., and through Pharmactinium, Inc. acquired certain rights to the APIT platform. Core technology patents were in-licensed from N.V. Organon which also provided seed funding. Pharmactinium, Inc. was party to a research and development agreement with MSKCC beginning in 1996. In 2002, this agreement and relationship was significantly expanded and now includes research and development, preclinical development, clinical trials and commercial technology licenses. In 2007, Pharmactinium, Inc. was merged with and into the Company. In 2007, the Company also acquired its sister company, Actinium Pharmaceuticals, Limited (Bermuda) (the "Bermuda Company"), by a merger of the Bermuda Company into the Company and thereby also acquired certain patent licenses relating to APIT previously licensed by the Bermuda Company to the Company.

In 2000, the Company also began what has become a long term relationship with General Atlantic Investments Limited (GAIL), an entity which has provided most of the Company's investment capital since 2000, totaling $50.7 million. In 2010, the parent of GAIL contributed and transferred its ownership of GAIL (now renamed Actinium Holdings, Limited), whose only asset at that time was the shares of API, to an indirect subsidiary of Memorial Sloan-Kettering Cancer Center. In January 2012, the Company closed on $6,685,418 in net funding through the sale of the Company's stock and a Senior Convertible Note financing. On December 19, 2012, Actinium completed a private offering of units, consisting of common stock, Series A warrants and Series B warrants. The price per unit was $1.65 for aggregate net proceeds of $4,469,776. Our executive office is located at 501 Fifth Avenue, 3rd Floor, New York, NY 10017 and our telephone number is (212) 300-2131. Our website address is

http://www.actiniumpharmaceuticals.com. Except as set forth below, the information on our website is not part of this Registration Statement.

Summary of Scientific and Business Achievements:

The Company's scientific and business achievements to date include:

- In-licensing a Phase II clinical stage monoclonal antibody, BC8, with safety and efficacy data in more than 250 patients in need of Hematopoietic Stem Cell Transplantation (HSCT, currently in 7 active Phase I and Phase II clinical trials;
- Commencing a Company sponsored multi-center Phase I/II clinical trial for Actimab-A in elderly Acute Myeloid Leukemia;
- Developing and organizing manufacturing of Actinium's lead drug candidate Actimab-A which was accepted by the FDA for multi-center human use;
- Supporting three physician sponsored clinical trials, including a Phase I and a Phase I/II trial with the alpha emitting radioactive isotope bismuth 213 (Bi-213) based AML drug and a Phase I clinical trial with the alpha emitting radioactive isotope actinium 225 (Ac-225) based AML drug;
- In-licensing the AML targeting monoclonal antibody known as HuM195 or Lintuzumab;
- Establishing clinical and preclinical development relationships with world-class institutions such as MSKCC, Fred Hutchinson Cancer Research Center (FHCRC) and University of Texas MD Anderson Cancer Center (the MD Anderson Cancer Center relationship includes clinical trials only), as well as leading clinical experts in the fields of AML and HSCT;
- Securing rights to an intellectual property estate that covers key aspects of the Company's proprietary technology platform;
- Supporting a number of pipeline projects, including preclinical experiments in metastatic prostate cancer, metastatic colon cancer, antiangiogenesis and breast cancer models;

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- Maintaining contractual relationship with Oak Ridge National Laboratory (ORNL) of the Department of Energy (DOE) which gives API access to most of the current world supply of Ac-225; and
- Successfully developing commercial production methods for actinium 225.

Business Strategy

API intends to potentially develop its most advanced clinical stage drug candidates through approval in the case of Iomab™-B and up to and including a Phase II proof of concept human clinical trial (a trial designed to provide data on the drug's efficacy) in the case of Actimab™-A. If these efforts are successful, API may elect to commercialize Iomab™-B on its own or with a partner in the U.S. and/or outside of the U.S. to out-license the rights to develop and commercialize the product to a strategic partner. In the case of Actimab™-A, API will most likely seek to enter into strategic partnerships whereby the strategic partner(s) co-fund(s) further human clinical trials of the drug that are needed to obtain regulatory approvals for commercial sale within and outside of the U.S. In parallel, the Company intends to identify and begin initial human trials with additional actinium-225 drug candidates in other cancer indications. API intends to retain marketing rights for its products in the U.S. whenever possible and outlicense marketing rights to its partners for the rest of the world.

Market Opportunity

API is competing in the marketplace for cancer treatments estimated at over $54 billion in 2011 sales per IMS Health and projected to exceed $76 billion per year by 2015, according to the Global Academy for Medical Education. While surgery, radiation and chemotherapy remain staple treatments for cancer, their use is limited by the fact that they often cause substantial damage to normal cells. On the other hand, targeted monoclonal antibody therapies exert most or all of their effect directly on cancer cells, but often lack sufficient killing power to eradicate all cancer cells with just the antibody. A new approach for treating cancer is to combine the precision of antibody-based targeting agents with the killing power of radiation or chemotherapy by attaching powerful killing agents to precise molecular carriers called monoclonal antibodies (mAb). The Company uses monoclonal antibodies labeled with radioisotopes to deliver potent doses of radiation directly to cancer cells while sparing healthy tissues. The radioisotopes we use are the alpha emitter Ac-225 and the beta emitter I-131. I-131 is among the best known and well characterized radioisotopes. It is used very successfully in treatment of papillary and follicular thyroid cancer as well as other thyroid conditions. It is also attached to a monoclonal antibody in treatment of Non-Hodgkin's Lymphoma (NHL). It is also used experimentally with different carriers in other cancers. Ac-225 has many unique properties and the Company is a leader in developing this alpha emitter for clinical applications using its proprietary APIT technology.

The Company's most advanced products are Actimab™-A, Ac-225 labeled mAb for treatment of newly diagnosed AML, a cancer of the blood, in patients ineligible for currently approved therapies, and Iomab™-B, I-131 labeled mAb for preparation of relapsed and refractory AML patients for hematopoietic stem cell transplantation (HSCT). Iomab™-B offers a potentially curative treatment for these patients most of whom do not survive beyond a year after being diagnosed with this condition. Iomab™-B has also demonstrated efficacy in HSCT preparation for other blood cancer indications, including Myelodysplastic Syndrome (MDS), acute lymphoblastic leukemia (ALL), Hodgkin's Lymphoma, and Non-Hodgkin's Lymphoma (NHL). These are all follow-on indications for which Iomab™-B can be developed and it is the Companies intention to explore these opportunities. In 2013, the Company intends to begin preclinical development of the mAb used in Iomab™-B by replacing I-131 with Ac-225. Such a follow-on product could have several advantages as a second generation product, including ease of transportation, minimal safety requirements for the centers using it, doses lower by orders of magnitude and significantly lower costs of manufacturing.

There are currently no FDA approved treatments for either Actimab™-A or Iomab™-B targeted patients.

Other potential product opportunities in which a significant amount of preclinical work is being undertaken include metastatic colorectal cancer, metastatic prostate cancer and antiangiogenesis which reduces the blood supply to solid tumors.

The Company believes that its biggest market opportunity lies in the applicability of the Company's APIT platform technology to a wide variety of cancers. A broad range of solid and blood borne cancers can be potentially targeted by monoclonal (mAbs) to enable treatment with its APIT technology. The APIT technology could potentially be applied to mAbs that are already FDA approved to create more efficacious and/or safer drugs ("biobetters").

Clinical Trials

The Company has completed a Phase I and Phase I/II physician trial in AML at MSKCC using Bismab®-A, The Company's first generation AML drug that consists of bismuth-213 attached to the antibody Lintuzumab™. The Phase II arm of the Bismab®-A drug study has shown signs of the drug's efficacy and safety, including reduction in peripheral blast counts and complete responses in some patients. Bi-213 is a daughter, i.e., product of the degradation of Ac-225, with cancer cell killing properties similar to Ac-225 but is less potent.

The Company has commenced its first company sponsored Phase I/II multi-center trial with fractionated (two) doses of Actimab™-A, Actinium's lead product for treatment of elderly AML that consists of an AML specific monoclonal antibody (HuM195, also known as Lintuzumab™) and the actinium 225 radioactive isotope attached to it. The Company intends to conduct these trials at world-class cancer institutions such as MSKCC, Johns Hopkins Medicine, University of Pennsylvania Health System, Fred Hutchinson Cancer Center and MD Anderson Cancer Center.

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The Company also continues to sponsor a Phase I AML trial at MSKCC with a single-dose administration of Actimab™-A. Initial data shows elimination of leukemia cells from blood in 67% of all evaluable patients who received a full dose and in 83% of those treated at dose levels above 0.5 microcuries (uCi/kg), and eradication of leukemia cells in both blood and bone marrow in 20% of all evaluable patients and 25% of those treated at dose levels above 0.5 uCi/kg. Dose levels in that trial have been reduced as we continue our work on establishing a maximum tolerated dose.

This Phase I trial builds on the experience with Company's first generation drug Bismab®-A that contains the same antibody used in Actimab™-A but labeled with bismuth 213, a less potent alpha emitting daughter of actinium 225 used in Actimab™-A. Bismab®-A trials and the Phase I Actimab™-A trial were focused on relapsed, refractory and other difficult to treat acute myeloid leukemia patients. The new multicenter Phase I/II trial is focused on newly diagnosed AML patients who have historically had better outcomes. In addition, the new trial includes low doses of chemotherapy with the goal of further improving patient outcomes.

Operations

The Company's current operations are primarily focused on furthering the development of its lead clinical drug candidates Actimab™-A and Iomab™-B. In the case of Actimab™-A, key ongoing activities include progressing a multi-center Phase I/II trial, support for an ongoing Phase I clinical trial at Memorial Sloan Kettering Cancer Center in New York, managing isotope and other materials supply chain, and managing the manufacturing of the finished drug candidate product. The Company has secured access to much of the currently available world reserves of Ac-225 and Bi-213 through a renewable contractual arrangement with the U.S. Department of Energy (DOE). The Company projects that these quantities are sufficient to support early stages of commercialization of alpha isotopes based products. The Company has also developed its own proprietary process for industrial scale Ac-225 production in a cyclotron in quantities adequate to support full product commercialization.

Operations related to Iomab™-B include planning for a registration trial which will include development of commercial scale manufacturing to be suitable for an approval trial and preparation of appropriate regulatory submissions.

Intellectual Property Portfolio

The Company's technology and products are protected by an extensive intellectual property estate in excess of 60 patents and patent applications, both in the U.S. and other countries. The cornerstones of the portfolio are patents and patent applications covering use of Ac-225 and Bi-213 for medical purposes and production of the Ac-225 isotope. Additional patents and applications relate to the Company's proprietary manufacturing and treatment processes. Additionally, the Company believes that several of its programs are likely eligible for "Orphan Drug Protection" including its products intended for AML as well as bone marrow transplants. Orphan Drug Protection in the United States refers to the protection provided by the 1983 Orphan Drug Act which provides seven years of market exclusivity to drugs developed to address diseases that affect fewer than 200,000 patients in the United States. Similar protection exists in Europe and provides for ten years of marketing exclusivity.

Key Strengths

The Company believes that the key elements for its market success include:

- Clinical results to date imply lower development risk for its lead drug candidates: The Company's lead drug candidates have been tested in over 300 patients and demonstrated favorable safety and efficacy profiles. Iomab™-B has been administered to more than 250 patients in a number of Phase I and Phase II trials and has shown a clear survival benefit in the indication for which it is being developed. Bismab®-A

and Actimab™-A, drugs based on the APIT platform have so far been tested in over 60 patients in 3 clinical trials. In each trial they exhibited few side effects and have shown indications of efficacy. The current proof-of-concept Actimab™-A Phase I/II clinical trial is directed at a patient population that is generally easier to treat (newly diagnosed vs. relapsed/refractory in previous trials), and employs a more potent treatment regimen (low dose chemotherapy plus two doses of ActimabTM-A plus low dose chemotherapy vs. a single dose of ActimabTM-A in the physician sponsored trial).

Additional product opportunities from the APIT platform: The Company's Alpha Particle Immunotherapy technology has the potential for broad applicability for the treatment of many cancer types, which allows the Company to add new product candidates to its pipeline based on well-defined patent protected methods. The next product from the platform is expected to be a second generation BC8 product linked to Ac-225, Actimab™-B which could potentially significantly expand the market that is targeted by Iomab™-B.

Collaboration with Memorial Sloan-Kettering Cancer Center (MSKCC): The Company's collaboration with MSKCC includes licensing, research and clinical trial arrangements involving MSKCC labs and clinicians and included financial support with respect to certain pre-2012 R&D-related expenses.

Scientific backing of leading experts: The Company's clinical advisory board and collaborators include some of the best recognized clinicians and scientists working at some of the highest regarded medical institutions in the U.S. and the world, including MSKCC, Johns Hopkins University, University of Pennsylvania, Fred Hutchinson Cancer Center and MD Anderson Cancer Center. This is expected to be beneficial to the Company both in clinical development and market acceptance assuming its drug candidates are approved.

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Isotope supply secured for clinical trials: The Company has a contractual relationship with ORNL (Oak Ridge National Laboratory of the Department of Energy (DOE)) that provides the Company access to the largest known supply reserves of actinium 225. Iodine 131 is readily available from a number of qualified pharmaceutical supply vendors.

Proprietary alpha emitting isotope manufacturing technology fully developed: The Company has developed its own proprietary technology for commercial scale manufacturing of actinium 225. This is expected to ensure commercial supply of Ac-225 for Actimab™-A, Actimab™-B and other actinium-linked products should they be approved.

cGMP Actimab™-A manufacturing developed: The Company has developed at a contractor's site full cGMP (current good manufacturing practices) manufacturing processes for its drug candidate Actimab™-A.

Substantial IP portfolio: The Company has an intellectual property portfolio in excess of 60 patents and patent applications, both in the U.S. and other countries, which cover clinical applications of the APIT technology and methods of manufacturing actinium 225 thus giving the Company control over both the applications of its technology and a supply chain of its key ingredients, actinium 225 and bismuth 213 alpha emitting isotopes.

Competition Overview

To the Company's knowledge, there are no other commercial entities that have significant programs in place for developing Ac-225- or Bi-213-based drugs. In the wider field of medical oncology, the Company faces competition from: developers of other alpha emitter based drug candidates, other radioimmunotherapy based technologies, technologies for labeling antibodies with toxic drugs (antibody-drug conjugates), and for each disease indication from all drugs available and/or in development.

For Company's lead indication, acute myeloid leukemia, there are a number of companies developing drugs for AML induction in the elderly. These drugs are most often small molecules. Until recently, our leukemia targeting monoclonal antibody HuM195 was under development as a native i.e. unconjugated mAb by Seattle Genetics, Inc., but its development has been discontinued due to lack of efficacy of the native mAb in that company's pivotal trial in AML. To our knowledge, there are no clinical trials that have shown significant efficacy in this indication.

In the field of hematopoietic stem cell transplantation, pharmaceuticals currently used for bone marrow ablation/conditioning are generic drugs and to our knowledge there are no significant industry efforts to enter this area, especially not in older patients.

Government Regulation

Governmental authorities in the United States and other countries extensively regulate, among other things, the research, development, testing, manufacture, labeling, promotion, advertising, distribution and marketing of radioimmunotherapy pharmaceutical products such as those being developed by the Company. In the United States, the U.S. Food and Drug Administration (FDA) regulates such products under the Federal Food, Drug and Cosmetic Act (FDCA) and implements regulations. Failure to comply with applicable FDA requirements, both before and after approval, may subject us to administrative and judicial sanctions, such as a delay in approving or refusal by the FDA to approve pending applications, warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions and/or criminal prosecution.

U.S. Food and Drug Administration Regulation

Our research, development and clinical programs, as well as our manufacturing and marketing operations, are subject to extensive regulation in the United States and other countries. Most notably, all of our products sold in the United States are subject to the FDA as implemented and enforced by the FDA. Certain of our product candidates in the United States require FDA pre-marketing approval of a Biologics License Application (BLA) pursuant to 21 C.F.R. § 314. Foreign countries may require similar or more onerous approvals to manufacture or market these products.

Failure by us or by our suppliers to comply with applicable regulatory requirements can result in enforcement action by the FDA, the Nuclear Regulatory Commission or other regulatory authorities, which may result in sanctions, including but not limited to, untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties; customer notifications or repair, replacement, refunds, recall, detention or seizure of our products; operating restrictions or partial suspension or total shutdown of production; refusing or delaying our requests for BLA premarket approval of new products or modified products; withdrawing BLA approvals that have already been granted; and refusal to grant export.

Properties

The Company does not own any property. The Company has a short-term lease of its office space at 501 Fifth Avenue, 3rd Floor, New York, NY 10017 through January 31, 2013. Thereafter, it becomes a month to month agreement. The Company pays $4,376 monthly.

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Employees

As of March 11, 2013, we have 3 full-time employees and 1 part-time employee. None of these employees are covered by a collective bargaining agreement, and we believe our relationship with our employees is good. We also engage consultants on an as-needed basis to supplement existing staff.

Legal Proceedings

From time to time, we may become involved in various lawsuits and legal proceedings, which arise in the ordinary course of business. Litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm business. We are currently not aware of any such legal proceedings or claims that will have, individually or in the aggregate, a material adverse effect on our business, financial condition or operating results.

MARKET PRICE OF AND DIVIDENDS ON OUR COMMON STOCK AND RELATED STOCKHOLDER MATTERS

Market Information

Our common stock is listed on OTCBB and OTCQB, under the symbol “CTVN”. However, there is no active market for our Common Stock and trading has been extremely limited. The last quoted price for our Common Stock was $1.50 for a trade on December 31, 2012, as reported on www.otcbb.com. However, as there is currently little to no market for our Common Stock, we believe that this last reported price does not accurately reflect the value of the Common Stock or the Company, and it may not be possible to sell Common Stock at this price.

Holders

As of March 12, 2013, assuming a 100% Share Exchange, there were 21,385,573 shares of Common Stock issued and outstanding, which were held by 348 holders of record. There are no shares of Preferred Stock outstanding.

Assuming a 100% Share Exchange, of the 21,385,573 shares of Common Stock issued and outstanding, 20,985,573 of such shares are restricted shares under the Securities Act. None of these restricted shares are eligible for resale absent registration or an exemption from registration under the Securities Act. As of the date hereof, until the provisions of Rule 144 are complied with, the exemption from registration provided by Rule 144 under the Securities Act is not available for these shares pursuant to Rule 144(i).

Registration Rights

Certain shareholders are entitled to certain registration rights, including piggy-back registration rights, with respect to the shares of common stock purchased in the offerings conducted by Actinium in 2011 and 2012.

Dividends

We have never declared or paid a cash dividend. Any future decisions regarding dividends are made by our Board of Directors. We currently intend to retain and use any future earnings for the development and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Our Board of Directors has complete discretion on whether to pay dividends. Even if our Board of Directors decides to pay dividends, the form, frequency and amount will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the Board of Directors may deem relevant.

Securities Authorized for Issuance Under Equity Compensation Plans

We do not have in effect any compensation plans under which our equity securities are authorized for issuance. The Company intends to adopt an equity compensation plan in which its directors, officers, employees and consultants shall be eligible to participate. However, no formal steps have been taken as of the date of this Registration Statement to adopt such a plan.

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

The information and financial data discussed below is derived from the audited consolidated financial statements of Cactus for its fiscal years ended December 31, 2012 and 2011. The consolidated financial statements of Cactus were prepared and presented in accordance with generally accepted accounting principles in the United States. The information and financial data discussed below is only a summary and should be read in conjunction with the historical financial statements and related notes of Cactus contained elsewhere in this Registration Statement. The financial statements contained elsewhere in this Registration Statement fully represent Cactus' financial condition and operations; however, they are not indicative of the Company's future performance. See "Cautionary Note Regarding Forward Looking Statements" above for a discussion of forward-looking statements and the significance of such statements in the context of this Registration Statement.

This discussion contains forward-looking statements reflecting our current expectations that involve risks and uncertainties. Actual results may differ materially from those discussed in these forward-looking statements due to a number of factors, including those set forth in the section entitled "Risk Factors" and elsewhere herein.

Overview

The Company was incorporated under the laws of the State of Nevada on October 6, 1997. The Company was a shell entity that is in the market for a merger with an appropriate operating company.

On December 28, 2012, the Company entered into a transaction (the "Share Exchange"), pursuant to which the Company acquired 21% of the issued and outstanding equity securities of Actinium Pharmaceuticals, Inc. ("Actinium"), in exchange for the issuance of 4,309,015 shares of common stock, par value $0.01 per share, of the Company (the "Common Stock"), which were issued to the shareholders of Actinium. As a result of the Share Exchange, the former shareholders of Actinium became the controlling shareholders of the Company. The Share Exchange was accounted for as a reverse takeover/recapitalization effected by a share exchange, wherein Actinium is considered the acquirer for accounting and financial reporting purposes.

Actinium, incorporated on June 13, 2000, is a biotechnology company committed to developing breakthrough therapies for life threatening diseases using its alpha particle immunotherapy (APIT) platform and other related and similar technologies. Actinium, together with its wholly owned subsidiary, MedActinium, Inc. (MAI), (hereinafter referred to collectively as "Actinium") has initiated collaborative efforts with large institutions to establish the proof of concept of alpha particle immunotherapy and has supported one Phase I/Il clinical trial and one Phase I clinical trial at Memorial Sloan-Kettering Cancer Center (MSKCC) under an MSKCC Physician Investigational New Drug Application. In 2012, Actinium launched a multi-center corporate sponsored trial in acute myeloid leukemia (AML) patients. Actinium's objective, through research and development, is to produce reliable cancer fighting products which utilize monoclonal antibodies linked with alpha particle emitters or other appropriate payloads to provide very potent targeted therapies. The initial clinical trials of Actinium's compounds have been with patients having acute myeloid leukemia and it is believed that Actinium's APIT platform will have wider applicability for different types of cancer where suitable monoclonal antibodies can be found.

As a result of the Share Exchange, the Company is now a holding company operating through Actinium, a clinical-stage biopharmaceutical company developing certain cancer treatments.

We develop drugs for treatment of cancer with intent to cure or significantly improve survival of the affected patients. As of now none of our drugs have been approved for sale in the United States or elsewhere. We have no commercial operations in sales or marketing of our products. All our product candidates are under development. In order to market

and sell our products we must conduct clinical trials on patients and obtain regulatory approvals from appropriate regulatory agencies like the Food and Drug Administration (FDA) in the United States and similar agencies elsewhere in the world.

Our products under development are monoclonal antibodies labeled with radioisotopes. We have one program with an antibody labeled with a beta emitter and several programs based on a proprietary patent protected platform technology called alpha particle immunotherapy or APIT. Our APIT technology is based on attaching actinium 225 (Ac-225) or bismuth 213 (Bi-213) alpha emitting radioisotopes to monoclonal antibodies. Alpha emitting radioisotopes are unstable chemical elements that decay by releasing alpha particles. Alpha particles can kill any cell in whose immediate proximity they are released. Monoclonal antibodies are genetically engineered proteins that target specifically certain cells, and can target cancer cells. It is crucial for the success of our drug candidates to contain monoclonal antibodies that can successfully seek cancer cells and can kill them with the attached isotope while not harming nearby normal cells. We do not have technology and operational capabilities to develop and manufacture such monoclonal antibodies and we therefore rely on collaboration with third parties to gain access to such monoclonal antibodies. We have secured rights to two monoclonal antibodies, HuM195 (Lintuzumab), in 2003 through a collaborative licensing agreement with Abbott Laboratories and BC8 in 2012 with the Fred Hutchinson Cancer Research Center. We expect to negotiate collaborative agreements with other potential partners that would provide us with access to additional monoclonal antibodies. Establishing and maintaining such collaborative agreements is a key to our success as a company.

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Under our own sponsorship as well as activity at FHCRC, we have four product candidates in active clinical trials: Actimab™-A (HuM195-Ac-225), Iomab™-B (BC8-I-131), BC8-Y-90 and BC8-SA. At this time, the Company is actively pursuing development of Actimab™-A and Iomab™-B while BC8-Y-90 and BC8-SA are in physician sponsored clinical phase I trials at the Fred Hutchinson Cancer Research Center.Actimab™-A is a combination of the monoclonal antibody we have in-licensed, Lintuzumab (HuM195), and the alpha emitting isotope actinium 225. Actimab™-A has shown promising results throughout preclinical development and an ongoing clinical trial started in 2006 in treating acute myeloid leukemia (AML) in the elderly. We have expanded the number of patients and number of clinical centers by commencing a new AML clinical trial which we have launched in 2012. This trial targets newly diagnosed AML patients over the age of 60. In order to conduct the trial we are engaged in funding, monitoring and quality assurance and control of the Lintuzumab antibody; procurement of actinium 225 isotope; funding, monitoring and quality assurance and control of the drug candidate Actimab™-A manufacturing and organizing and monitoring clinical trials. We estimate that the direct costs to completion of both parts of the ongoing Phase I/II trial will be approximately US $7 million.Iomab™-B is a combination of the in-licensed monoclonal antibody BC8 and the beta emitting radioisotope iodine 131. This construct has been extensively tested in Phase I and Phase II clinical trials in approximately 250 patients with different blood cancer indications who were in need of a hematopoietic stem cell transplantation (HSCT). Iomab™-B is used to condition the bone marrow of these patients by destroying blood cancer cells in their bone marrow and elsewhere thus allowing for a subsequent transplant containing healthy donor bone marrow stem cells. We have decided to develop this drug candidate by initially focusing on the patients over 50 with active acute myeloid leukemia in relapse and/or refractory to existing treatments. Our intention is to request the FDA in 2013 to allow us to enter into a pivotal trial with Iomab™-B. We estimate the direct costs of such a trial to completion anticipated in 2015 will be approximately US $15-20 million.

We have primarily management position employees and consultants who direct, organize and monitor the activities described above through contractors. Much of the in vivo laboratory and clinical work contracted for by the Company has been conducted at Memorial Sloan-Kettering Cancer Center in New York. The Company has also made clinical trial arrangements with other well known cancer centers.

Our Actimab™-A drug candidate and its components are contract manufactured and maintained under our supervision by specialized contract manufacturers and suppliers in the U.S., including IsoTex Diagnostics, Oak Ridge National Laboratory, Pacific GMP, Fischer Bioservices, BioReliance and others.

We are a development stage company and have never generated revenue. Currently we do not have a stable recurring source of revenues sufficient to cover our operating costs. As of December 31, 2012, we had an accumulated deficit of $55 million. We incurred net losses of $8.3 million and $3.4 million in the years ending December 31, 2012 and 2011, respectively.

Emerging Growth Company

We are an “emerging growth company” under the federal securities laws and will be subject to reduced public company reporting requirements. In addition, Section 107 of the JOBS Act also provides that an “emerging growth company” can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. In other words, an “emerging growth company” can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We are choosing to take advantage of the extended transition period for complying with new or revised accounting standards.

Opportunities, Challenges and Risks

The market for drugs for cancer treatment is a large market in need of novel products, in which successful products can command multibillion dollars in annual sales. A number of large pharmaceutical and biotechnology company

regularly acquire products in development, with preference given to products in Phase II or later clinical trials. These deals are typically structured to include an upfront payment that ranges from several million dollars to tens of million dollars or more and additional milestone payments tied to regulatory submissions and approvals and sales milestones. Our goal is to develop our product candidates through Phase II clinical trials and enter into partnership agreements with one or more large pharmaceutical and/or biotechnology companies.

We believe our future success will be heavily dependent upon our ability to successfully conduct clinical trials and preclinical development of our drug candidates. This will in turn depend on our ability to continue our collaboration with Memorial Sloan-Kettering Cancer Center and our Clinical Advisory Board members plan to continue and expand other research and clinical trial collaborations. In addition, we will have to maintain sufficient supply of actinium 225 and successfully maintain and if and when needed replenish or obtain our reserves of monoclonal antibodies. We will have to maintain and improve manufacturing procedures we have developed for production of our drug candidates from the components that include the iodine 131 and actinium 225 isotopes, monoclonal antibodies and other materials. It is possible that despite our best efforts our clinical trials results may not meet regulatory requirements for approval. If our efforts are successful, we will be able to partner our development stage products on commercially favorable terms only if they enjoy appropriate patent coverage and/or considerable know-how and other protection that ensures market exclusivity. For that reason we intend to continue our efforts to maintain existing and generate new intellectual property. Intellectual property is a key factor in the success of our business as well as market exclusivity.

To achieve the goals discussed above we intend to continue to invest in research and development at high and constantly increasing rates thus incurring further losses until one or more of our products are sufficiently developed to partner them to large pharmaceutical and biotechnology companies.

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Results of Operations

Year Ended December 31, 2012 Compared to Year Ended December 31, 2011

The following table sets forth, for the periods indicated, data derived from our statements of operations:

	For the Years ended December 31, 2012	2011	Increase (Decrease)
Revenues	$ -	$ -	$ -
Operating expenses:			
Research and development, net of reimbursements	3,440,485	323,788	3,116,697
General and administrative	4,506,232	2,959,246	1,546,986
Depreciation expense	581	633	(52)
Total operating expenses	7,947,298	3,283,667	4,633,631
Other (income) expense:			
Interest expense	1,099,327	175,094	924,233
Gain on change in fair value of derivative liabilities	(685,420)	(13,966)	(671,454)
Total other (income) expense	413,907	161,128	252,779
Net loss	$ (8,361,205)	$ (3,444,795)	$ (4,916,410)

Revenues

We recorded no commercial revenues for the year ended December 31, 2012 and 2011.

Research and Development Expense

Research and development expenses increased by to $3,116,697 to $3,440,485 for the year ended December 31, 2012 compared to $323,788 for the year ended December 31, 2011. The increase is attributable to the costs incurred on initiation of the multi-center clinical trial for Actimab™-A. The Company also made its first milestone payment of $750,000 to Abbott Biotherapeutics Corp. upon reaching the milestone. The increase also reflected an agreement the Company made with MSKCC as of April 2010, in which MSKCC agreed to pay or reimburse the Company for certain costs and expenses related to the Company's drug development and clinical study program. This agreement expired on October 5, 2011. No reimbursement was due for the year ended December 31, 2012 and $237,834 was due for the year ended December 31, 2011.

General and Administrative Expenses

Overall, total general and administrative expenses increased by $1,546,986 to $4,506,232 for the year ended December 31, 2012 compared to $2,959,246 for the year ended December 31, 2011. The increase was largely attributable to increases in professional fees and the stock-based compensation incurred by the Company as discussed below.

In connection with the Company's stock offering, in January 2012, we issued warrants to purchase 400,013 shares of common stock to the transaction manager for consulting services related to assisting the Company in preparing to

become a publicly traded company. The fair value of $144,463, or $0.36 per share, was a noncash charge to general and administrative expenses for the year ended December 31, 2012. In February 2012, the Company granted options to purchase 2,125,000 shares of common stock to its employees and consultants with a fair value of $531,913. In July 2012, the Company granted options to purchase 90,000 shares of common stock to its consultants with a fair value of $23,770. In August 2012, the Company granted options to purchase 2,875,000 shares of common stock to its employees and consultants with a fair value of $724,784. During the fourth quarter, the Company granted options to purchase 1,085,000 shares of common stock to its employees and consultants with a fair value of $239,310. For the year ended December 31, 2012, the Company recorded amortization of stock-based compensation of $266,172 as a noncash charge to general and administrative expenses.

The increase can also be attributed to additional professional fees of $549,383 related to the year-end audit, the quarterly review, legal fees, and management fees associated with the Company going public. In addition to the professional fees incurred, we increased our personnel. As such, payroll-related expenses for the year ended December 31, 2012 increased compared to the same period in 2011.

Interest Expense

Interest expense increased by $924,233 for the year ended December 31, 2012 compared to the year ended December 31, 2011. The increase in interest expense is directly attributable to interest accrued on the convertible debt, amortization of the convertible debt discount and deferred financing costs related to the convertible debt.

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Net Loss

Net loss increased by $4,916,410 to $8,361,205 for the year ended December 31, 2012 compared $3,444,795 for to the year ended December 31, 2011. The increase was primarily due to additional costs incurred by the Company in research and development expenses, non-cash stock-based compensation costs and professional fees as discussed above.

Liquidity and Capital Resources

We have financed our operations primarily through sales of the Company's stock and the issuance of Convertible Promissory Notes.

We did not have any cash or cash equivalents held in financial institutions located outside of the United States as of December 31, 2012 and 2011. We do not anticipate this practice will change in the future.

The following tables sets forth selected cash flow information for the periods indicated:

	For the years ended December 31,	
	2012	2011
Cash provided by (used in) operating activities	$ (5,212,710)	$ (517,592)
Cash provided by (used in) investing activities	(2,359)	-
Cash provided by (used in) financing activities	5,129,940	6,025,255
Net increase (decrease) in cash	$ (85,129)	$ 5,507,663

Net cash used in operating activities was $5,212,710 for the year ended December 31, 2012 compared to $517,592 used in operations for the same period in 2011. Cash used in operations increased due to the increase in spending related to preparations and eventual launch and conduct of a multicenter trial and an increase in spending related to professional fees combined with an increase in payroll-related expenses.

Net cash provided by financing activities was $5,129,940 for the year ended December 31, 2012 compared to $6,025,255 for the same period in 2011. In January 2012, we sold 968,759 shares of our stock at $0.78 per share. In 2012, we also sold 3,118,988 shares of our common stock at $1.65 per share. We raised funds through sale of the Company's stock to finance the expansion of our research and development efforts.

We have experienced cumulative losses of approximately $55,743,463 from inception (June 13, 2000) through December 31, 2012, and have stockholders' equity of $1,145,635 at December 31, 2012. In addition, the Company has not completed its efforts to establish a stable recurring source of revenues sufficient to cover its operating costs for the next twelve months. These factors raise substantial doubt regarding the Company's ability to continue as a going concern.

Recent Debt and Equity Offerings

During 2011, the Company raised $6,184,967 by selling 7,891,141 shares of the Company's stock and warrants to purchase 19,972,785 shares of the Company's stock through an offering ("Stock Offering"). A net amount of $5,379,367 was received by the Company in 2011. The Company paid Laidlaw & Company (UK) Ltd. ("Laidlaw & Co."), the placement agent, total cash fees of $742,196, which consisted of placement agent commission of $618,497 and

expense reimbursement of $123,699. In addition, the Company paid Laidlaw & Co.'s outside counsel, McCormick & O'Brien PLLC, $60,904 for its services as the placement agent's legal counsel and Signature Bank $2,500 for the bank escrow fee.

On December 27, 2011, the Company completed a private offering of 8% Senior Subordinated Unsecured Convertible Promissory Notes ("Convertible Notes") in the amount of $900,000 and received net proceeds of $750,000. The convertible notes were issued at 83.33% of the principal amount resulting in an original issue discount of $150,000. The Convertible Notes mature one year from the date of issuance. Interest accrues at the rate of 8% per year on the outstanding principal amount, accrued semi-annually and to be paid at maturity. On December 19, 2012, in connection with the Share Exchange, the Convertible Notes were converted into 1,252,550 share of common stock.

During 2012, the Company raised $759,300 by selling 968,759 shares and warrants to purchase 242,190 shares of the Company's common stock under the Company's Stock Offering. A net amount of $660,164 was received by the Company in 2012. The Company paid Laidlaw & Co. total cash fees of $91,116, which consisted of placement agent commission of $75,930 and expense reimbursement of $15,186. In addition, the Company paid Laidlaw & Co.'s outside counsel, McCormick & O'Brien PLLC, $8,020 for its services as the placement agent's legal counsel.

In 2012, the Company also raised $5,151,450 through an offering of 3,118,988 shares of its common stock and "A Warrants" to purchase 3,118,988 shares of the Company's common stock, exercisable at a price of $1.65 per share for a period of 120 days from the day of the final closing of the offering, and "B Warrants" to purchase 1,559,505 shares of the Company's common stock, exercisable at a price of $2.48 per share for a period of 5 years from the date of the final closing of the offering. ("2012 Common Stock Offering") A net amount of $4,469,776 was received by the Company. Pursuant to the 2012 Common Stock Offering agreement, the Company paid Laidlaw & Co. total cash fees of $618,174, which consisted of placement agent commission of $515,145 and expense reimbursement of $103,029. The Company also issued the placement agent warrants to purchase an aggregate of 467,845 shares of the Company's common stock, with an exercise price of $0.78 per share and a term of 5 years. These placement agent warrants were valued at $499,707 and recorded as derivative liabilities. In addition, the Company paid the Laidlaw & Co.'s outside counsel, Richardson & Patel, LLP, $60,000 for its services as the Laidlaw & Co.'s legal counsel and Signature Bank $3,500 for the bank escrow fee.

Actinium intends to increase funds available to continue our research and development efforts, which include material supply, manufacturing, clinical development and pre-clinical trials and working capital. In 2013, we expect cash needs of up to $20,000,000 to finance research and development, which include material supply, manufacturing, clinical trials and pre-clinical trials and to cover our ongoing working capital needs. If all of the securities offered hereunder are sold, we believe that the net proceeds from this offering will provide us with the capital needed for these plans.

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In the event we do not meet our cash needs of $20,000,000, it may be necessary for us to delay the timing of various product development efforts and focus on our ongoing clinical trial with Actimab™-A.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors.

Seasonality

We do not have a seasonal business cycle. Our revenues and operating results are generally derived evenly throughout the calendar year.

Critical Accounting Policies

Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States. To prepare these financial statements, we must make estimates and assumptions that affect the reported amounts of assets and liabilities. These estimates also affect our expenses. Judgments must also be made about the disclosure of contingent liabilities. Actual results could be significantly different from these estimates. We believe that the following discussion addresses the accounting policies that are necessary to understand and evaluate our reported financial results.

Derivatives

All derivatives are recorded at fair value and recorded on the balance sheet. Fair values for securities traded in the open market and derivatives are based on quoted market prices. Where market prices are not readily available, fair values are determined using market based pricing models incorporating readily observable market data and requiring judgment and estimates.

Fair Value of Financial Instruments

Fair value is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants. A fair value hierarchy has been established for valuation inputs that gives the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs. The fair value hierarchy is as follows:

Level 1 Inputs – Unadjusted quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date.

Level 2 Inputs – Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly. These might include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (such as interest rates, volatilities, prepayment speeds, credit risks, etc.) or inputs that are derived principally from or corroborated by market data by correlation or other means.

Level 3 Inputs – Unobservable inputs for determining the fair values of assets or liabilities that reflect an entity's own assumptions about the assumptions that market participants would use in pricing the assets or liabilities.

Income Taxes

The Company uses the asset and liability method in accounting for income taxes. Under this method, deferred tax assets and liabilities are determined based on differences between financial reporting and income tax carrying amounts of assets and liabilities and are measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse. The Company reviews deferred tax assets for a valuation allowance based upon whether it is more likely than not that the deferred tax asset will be fully realized. A valuation allowance, if necessary, is provided against deferred tax assets, based upon management’s assessment as to their realization.

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Research and Development Costs

Research and development costs are expensed as incurred. Research and development reimbursements and grants are recorded by the Company as a reduction of research and development costs.

Share-Based Payments

The Company estimates the fair value of each stock option award at the grant date by using the Black-Scholes option pricing model and common shares based on the last common stock valuation done by third party valuation expert of the Company's common stock on the date of the share grant. The fair value determined represents the cost for the award and is recognized over the vesting period during which an employee is required to provide service in exchange for the award. As share-based compensation expense is recognized based on awards ultimately expected to vest, the Company reduces the expense for estimated forfeitures based on historical forfeiture rates. Previously recognized compensation costs may be adjusted to reflect the actual forfeiture rate for the entire award at the end of the vesting period. Excess tax benefits, if any, are recognized as an addition to paid-in capital.

Recent Accounting Pronouncements

There were various accounting standards and interpretations issued during 2012 and 2011, none of which are expected to have a material impact on the Company's financial position, operations or cash flows.

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DIRECTORS AND EXECUTIVE OFFICERS

The following sets forth information about our directors and executive officers:

Name	Age	Position
Sergio Traversa, MBA	52	Interim Chief Executive Officer, President, Interim Chief Financial Officer and Director
Dragan Cicic, MD	49	Chief Operating Officer and Chief Medical Officer
Rosemary Mazanet, MD, PhD	57	Director
David Nicholson, PhD	58	Director
Sandesh Seth, MS, MBA	48	Director

Sergio Traversa, Interim Chief Executive Officer and President, Interim Chief Executive Officer and Director

Dr. Traversa has been a Director of the Company since August, 2012. Dr. Traversa is also the Chief Executive Officer of Relmada Therapeutics Inc.. Previously, he was the co-founder and CEO of Medeor Inc. a spinoff pharmaceutical company from Cornell University. Dr. Traversa has over 25 years of experience in the healthcare sector in the United States and Europe, ranging from management positions in the pharmaceutical industry to investing and strategic advisory roles. He has held financial analyst, portfolio management and strategic advisory positions at large U.S. investment firms specializing in healthcare, including Mehta and Isaly and Mehta partners, ING Barings, Merlin BioMed and Rx Capital. Dr. Traversa was a founding partner of Ardana Capital, a pharmaceutical and biotechnology investment advisory firm. In Europe, he held the position of Area Manager for Southern Europe (Italy, Spain, Greece and Portugal) of Therakos Inc., a cancer and immunology division of Johnson & Johnson. Prior to Therakos, Dr. Traversa was at Eli Lilly, where he served as Marketing Manager of the Hospital Business Unit. He was also a member of the CNS team at Eli Lilly, where he participated in the launch of Prozac and the early development of Zyprexa and Cymbalta. Dr. Traversa started his career as a sales representative at Farmitalia Carlo Erba, the largest pharmaceutical company in Italy later sold to Pharmacia and now part of Pfizer. Dr. Traversa holds a Laurea degree in Pharmacy from the University of Turin (Italy) and an MBA in Finance and International Business from the New York University Leonard Stern School of Business.

Dragan Cicic, MD, MBA, Chief Operating Officer and Chief Medical Officer

Dragan Cicic is the COO and CMO of the Company and Actinium. He joined the company in 2005 and previously held the position of the CEO and prior to that of the Medical Director at Actinium. Dr. Cicic joined Actinium from the position of Project Director of QED Technologies Inc., a life sciences strategic consulting and transactional group focused on emerging biotech, pharmaceuticals and medical devices companies. Dr. Cicic prepared business and strategic plans on behalf of those clients and assisted them in raising funding. He also represented corporate and private investors in identifying acquisition and/or investment targets and negotiating, structuring and consummating deals. Prior to joining QED Technologies, Dr. Cicic was an investment banker with SG Cowen Securities.

Dr. Cicic graduated as a Medical Doctor from the School of Medicine at The Belgrade University, and received his MBA from Wharton School at The University of Pennsylvania. He was also a Nieman Fellow at Harvard University.

Rosemary Mazanet MD, PhD, Director

Rosemary Mazanet is a Director of the Company and a life sciences investment professional and executive with management and drug development experience. She is a Co-Founder and CSO of Apelles Investment Management,

LLC, a public and private equity investment firm, focused on healthcare and the CEO of Diabetes America, Inc., the premier network of diabetes care and management centers. Prior to that, Dr. Mazanet was a General Partner, Director of Research and CSO of Oracle Partners, LP, a $1 Billion healthcare hedge fund. Dr. Mazanet has also been the CEO of several life sciences companies, including Breakthrough Therapeutics LLC and Access Pharmaceuticals (OTC: ACCP). She started her career in business as a Sr. Director of Clinical Research with Amgen, Inc.

In addition, Dr. Mazanet is a trustee of the University of Pennsylvania School of Medicine/Hospital and a director with and Cellumen, Inc. She trained in internal medicine at the Brigham and Women's Hospital and in oncology at the Dana Farber Cancer Institute, both part of the Harvard Medical system, where she was a staff physician prior to joining Amgen. Dr. Mazanet holds a B.A. in Biology from the University of Virginia and an M.D. and a Ph.D. from the University of Pennsylvania.

C. David Nicholson, BS, PhD, Director

C. David Nicholson is a Director of the Company and joined the Executive Committee of Bayer CropScience on March 5, 2012 as Head of Research & Development responsible for the integration of the company's R&D activities into one global organization. Dr. Nicholson graduated in pharmacology, earning his B.Sc. from the University of Manchester (1975) and his Ph.D. from the University of Wales (1980). Between 1978 and 1988, Dr. Nicholson worked in the pharmaceutical industry for the British company Beecham-Wülfing in Gronau, Germany. The main emphasis of his activities as group leader in a multidisciplinary project group was the development of cardiovascular drugs.

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From 1988-2007, Dr, Nicholson held various positions of increasing seniority in the UK, the Netherlands and the USA with Organon a Business Unit of Akzo Nobel. Ultimately he became Executive Vice President, Research & Development, and member of the Organon Executive Management Committee. He implemented change programs, leading to maximizing effectiveness in research & development, ensuring customer focus and the establishment of a competitive pipeline of innovative drugs. In 2007, Dr. Nicholson transferred to Schering-Plough, Kenilworth, New Jersey, USA, as Senior Vice President, responsible for Global Project Management and Drug Safety. From 2009 to December 2011, he was Vice President Licensing and Knowledge Management at Merck in Rahway, New Jersey, USA, reporting to the President of Merck R&D. As an integration team member, David Nicholson played a role in the strategic mergers of Organon BioSciences, the human and animal health business of Dutch chemical giant Akzo-Nobel, and Schering-Plough in 2007 as well as of Schering-Plough and Merck in 2009. C. David Nicholson is presently on the Board of multiple biotechnology companies, including Actinium Pharmaceuticals, Inc.

Sandesh Seth, MS, MBA, Director

Mr. Sandesh Seth is a Director of the Company and also the Head of Healthcare Investment Banking at Laidlaw & Company (UK) Ltd. (the ”Placement Agent”) which has served as the company’s Placement Agent. Mr. Seth has over 20 years of experience which includes prior investment banking at Cowen & Co., equity research at Bear Stearns and Commonwealth Associates and in the pharmaceutical industry at Pfizer, Warner-Lambert, and SmithKline Beecham in strategic planning, business development and R&D project management respectively. Mr. Seth’s financial services experience includes 75+ completed transactions in which $5 billion+ in capital was raised. Transactions included venture investments, private placements, IPOs, FOs, PIPEs, Convertible and High-Yield Debt. Mr. Seth was also involved with various strategic initiatives such as mergers and acquisitions, leveraged and management buy-outs, and licensing and joint ventures, including the $100 billion merger of Pfizer and Warner-Lambert and the $20 billion merger of Pharmacia & Upjohn with Monsanto. Mr. Seth has an MBA in Finance from New York University; an M.S. in the Pharmaceutical Sciences from the University of Oklahoma Health Center and a B.Sc. in Chemistry from Bombay University. He has published several scientific articles and was awarded the University Regents Award for Research Excellence at the University of Oklahoma. Mr. Seth was designated as Regulatory Affairs Certified (R.A.C.) by the Regulatory Affairs Professionals Society which signifies proficiency with U.S. FDA regulations. He also holds the following Securities Industry Licenses: Series 7, 79 and 63.

Corporate Governance

The business and affairs of the Company are managed under the direction of the Board of Directors.

Term of Office

Directors are appointed for a one-year term to hold office until the next annual general meeting of stockholders or until removed from office in accordance with our bylaws. Our officers are appointed by our Board and hold office until removed by our Board.

All officers and directors listed above will remain in office until the next annual meeting of our stockholders, and until their successors have been duly elected and qualified. Our bylaws provide that officers are appointed annually by our Board and each executive officer serves at the discretion of our Board.

Director Independence

We use the definition of “independence” of The NASDAQ Stock Market to make this determination. NASDAQ Listing Rule 5605(a)(2) provides that an “independent director” is a person other than an officer or employee of the company or any other individual having a relationship which, in the opinion of the Company’s Board, would interfere with the

exercise of independent judgment in carrying out the responsibilities of a director. The NASDAQ listing rules provide that a director cannot be considered independent if:

- the director is, or at any time during the past three years was, an employee of the company;
- the director or a family member of the director accepted any compensation from the company in excess of $120,000 during any period of 12 consecutive months within the three years preceding the independence determination (subject to certain exclusions, including, among other things, compensation for board or board committee service);
- a family member of the director is, or at any time during the past three years was, an executive officer of the company;
- the director or a family member of the director is a partner in, controlling stockholder of, or an executive officer of an entity to which the company made, or from which the company received, payments in the current or any of the past three fiscal years that exceed 5% of the recipient's consolidated gross revenue for that year or $200,000, whichever is greater (subject to certain exclusions);
- the director or a family member of the director is employed as an executive officer of an entity where, at any time during the past three years, any of the executive officers of the company served on the compensation committee of such other entity; or
- the director or a family member of the director is a current partner of the company's outside auditor, or at any time during the past three years was a partner or employee of the company's outside auditor, and who worked on the company's audit.

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Our Common Stock is not currently quoted or listed on any national exchange or interdealer quotation system with a requirement that a majority of our board of directors be independent and, therefore, the Company is not subject to any director independence requirements. Under the following three NASDAQ director independence rules a director is not considered independent: (a) NASDAQ Rule 5605(a)(2)(A), a director is not considered to be independent if he or she also is an executive officer or employee of the corporation, (b) NASDAQ Rule 5605(a)(2)(B), a director is not consider independent if he or she accepted any compensation from the company in excess of $120,000 during any period of twelve consecutive months within the three years preceding the determination of independence, and (c) NASDAQ Rule 5605(a)(2)(D), a director is not considered to be independent if he or she is a partner in, or a controlling shareholder or an executive officer of, any organization to which the company made, or from which the company received, payments for property or services in the current or any of the past three fiscal years that exceed 5% of the recipient's consolidated gross revenues for that year, or $200,000. Under such definitions, David Nicholson and Sergio Traversa are the only independent directors.

Committees of the Board of Directors

On December 28, 2012, our board of directors formed two standing committees: audit and compensation. Actions taken by our committees are reported to the full board. Each of our committees has a charter and each charter is posted on our website.

Audit Committee	Compensation Committee
Dr. Sergio Traversa*	Dr. David Nicholson*
Dr. David Nicholson	Dr. Rosemary Mazanet
Dr. Rosemary Mazanet	Sandesh Seth

* Indicates committee chair

Audit Committee

Our audit committee, which currently consists of three directors, provides assistance to our board in fulfilling its legal and fiduciary obligations with respect to matters involving the accounting, financial reporting, internal control and compliance functions of the company. Our audit committee employs an independent registered public accounting firm to audit the financial statements of the company and perform other assigned duties. Further, our audit committee provides general oversight with respect to the accounting principles employed in financial reporting and the adequacy of our internal controls. In discharging its responsibilities, our audit committee may rely on the reports, findings and representations of the company’s auditors, legal counsel, and responsible officers. Our board has determined that all members of the audit committee are financially literate within the meaning of SEC rules and under the current listing standards of the Nasdaq Capital Market. Our board has also determined that Dr. Traversa qualifies as an “audit committee financial expert.”

Compensation Committee

Our compensation committee, which currently consists of three directors, establishes executive compensation policies consistent with the company’s objectives and stockholder interests. Our compensation committee also reviews the performance of our executive officers and establishes, adjusts and awards compensation, including incentive-based compensation, as more fully discussed below. In addition, our compensation committee generally is responsible for:

- establishing and periodically reviewing our compensation philosophy and the adequacy of compensation plans and programs for our directors, executive officers and other employees;

overseeing our compensation plans, including the establishment of performance goals under the company's incentive compensation arrangements and the review of performance against those goals in determining incentive award payouts;

overseeing our executive employment contracts, special retirement benefits, severance, change in control arrangements and/or similar plans;

acting as administrator of any company stock option plans; and

overseeing the outside consultant, if any, engaged by the compensation committee.

Our compensation committee periodically reviews the compensation paid to our non-employee directors and the principles upon which their compensation is determined. The compensation committee also periodically reports to the board on how our non-employee director compensation practices compare with those of other similarly situated public corporations and, if the compensation committee deems it appropriate, recommends changes to our director compensation practices to our board for approval.

Outside consulting firms retained by our compensation committee and management also will, if requested, provide assistance to the compensation committee in making its compensation-related decisions.

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Family Relationships

There are no family relationships among any of our officers or directors.

Involvement in Certain Legal Proceedings

To our knowledge, none of our current directors or executive officers has, during the past ten years:

- been convicted in a criminal proceeding or been subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);
- had any bankruptcy petition filed by or against the business or property of the person, or of any partnership, corporation or business association of which he was a general partner or executive officer, either at the time of the bankruptcy filing or within two years prior to that time;
- been subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction or federal or state authority, permanently or temporarily enjoining, barring, suspending or otherwise limiting, his involvement in any type of business, securities, futures, commodities, investment, banking, savings and loan, or insurance activities, or to be associated with persons engaged in any such activity;
- been found by a court of competent jurisdiction in a civil action or by the SEC or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated;
- been the subject of, or a party to, any federal or state judicial or administrative order, judgment, decree, or finding, not subsequently reversed, suspended or vacated (not including any settlement of a civil proceeding among private litigants), relating to an alleged violation of any federal or state securities or commodities law or regulation, any law or regulation respecting financial institutions or insurance companies including, but not limited to, a temporary or permanent injunction, order of disgorgement or restitution, civil money penalty or temporary or permanent cease-and-desist order, or removal or prohibition order, or any law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity; or
- been the subject of, or a party to, any sanction or order, not subsequently reversed, suspended or vacated, of any self-regulatory organization (as defined in Section 3(a)(26) of the Exchange Act), any registered entity (as defined in Section 1(a)(29) of the Commodity Exchange Act), or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

Except as set forth in our discussion below in “Certain Relationships and Related Transactions,” none of our directors or executive officers has been involved in any transactions with us or any of our directors, executive officers, affiliates or associates which are required to be disclosed pursuant to the rules and regulations of the SEC.

Code of Ethics

The Company has adopted a code of ethics, a copy of which is attached as Exhibit 14.1 to the Form 8-K filed on January 2, 2013.

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EXECUTIVE COMPENSATION

Summary Compensation Table

The following table provides information regarding the compensation earned during the fiscal years ended December 31, 2012, December 31, 2011 and December 31, 2010 by our Chief Executive Officer and the two next most highly compensated executive officers.

Name/Position	Year	Salary	Bonus	Option Awards	All Other Compensation	Total
Jack Talley, former CEO, resigned on February 28, 2013	2012	$ 250,000	$ -	$ 58,412	$ -	$ 308,412
	2011	-	-	-	-	-
	2010	-	-	-	-	-
Dragan Cicic, COO	2012	$ 190,658	$ -	$ 58,426	$ -	$ 249,084
	2011	190,658	50,000	9,717	-	250,375
	2010	190,658	-	9,717	-	200,375
Enza Guagenti, former CFO, resigned on March 9, 2013	2012	$ 90,000	$ -	$ 3,394	$ -	$ 93,394
	2011	-	-	-	-	-
	2010	-	-	-	-	-
Diane Button,CEO, CFO (1)	2012	$ -	$ -	$ -	$ -	$ -
	2011	$ -	$ -	$ -	$ -	$ -
	2010	$ -	$ -	$ -	$ 6,000	$ 6,000

(1) Ms. Diane Button resigned as the Company's CEO and CFO on December 28, 2012.

Under the terms of Dr. Cicic's employment contract and the agreed upon written terms of employment for Ms. Guagenti, these employees are entitled to receive severance of twelve months, twelve months and three months base salary, respectively, upon termination by the Company without cause, or upon resignation within thirty days after a change in job responsibilities and a reduction in base salary. On February 28, 2013, Mr. Talley resigned as Chief Executive Officer and Director of the Company and Actinium. On March 9, 2013, Ms. Guagenti resigned as Chief Financial Officer of the Company and Actinium.

As an "emerging growth company" we will not be required to provide information relating to the ratio of total compensation of our Chief Executive Officer to the median of the annual total compensation of all of our employees, as required by the Investor Protection and Securities Reform Act of 2010, which is part of the Dodd-Frank Wall Street Reform and Consumer Protection Act.

Director Compensation

Historical non-management Directors of the Company do not receive any cash compensation. Commencing October 1, 2012, non-management Directors of Actinium(and now the Company) began to receive a quarterly cash retainer of $7,500 per calendar quarter for their service on the Board of Directors. They also receive reimbursement for out-of-pocket expenses and certain directors have received stock option grants for shares of Company Common Stock as described in the beneficial ownership table in the section titled "SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT."

Employment Agreements

On July 23, 2012, Actinium entered into an employment agreement with Jack Talley, as our, Chief Executive Officer. The initial term of employment was for a period of three (3) years, provided that Mr. Talley's employment with the company will be on an "at will" basis. Actinium agreed to pay a base salary of $250,000 per annum. The board will review Mr. Talley's base salary with help of an independent compensation consultant to adjust his base salary to be competitively aligned to a range between the 25th and 75th percentile of the relevant market data of CEO positions of similarly situated publicly traded biotec companies. Mr. Talley is also entitled to participate in an executive bonus program, which shall be established by the board pursuant to which the board shall award bonuses to Mr. Tally, based on achievement of written individual and corporate objectives such as the board shall determine. Upon the attainment of such performance objectives, in addition to base salary, Mr. Talley shall be entitled to a cash bonus in an amount to be determined by the Board up to fifty percent (50%) of his base salary. Actinium also agreed to grant to Mr. Talley an option grant to purchase common shares of the Company equal to three percent (3.0%) of the Company's issued and outstanding equity (common and preferred shares) on a fully diluted basis. Such options will have an exercise price of $0.261 cents per share which is equal to fair market value as determined by the board on the date of the grant. Twenty-eight percent (28%) of the initial options granted shall vest twelve months after the date of grant and two percent (2%) of the remainder shall vest each month thereafter until fully vested. Additional options will be granted upon the final closing of the Company's next financing so that total options granted will equal three percent (3%) of fully diluted shares on that date. Such additional options will have an exercise price per share which is equal to fair market value as determined by the Board on the date of the grant. Two percent (2%) of such additional options shall vest each month thereafter until fully vested. The term of all options granted under this Agreement will be for 10 years from the date of grant, subject to your continuing service with the Company. On February 28, 2013, Mr. Talley resigned as Chief Executive Officer and Director of the Company and Actinium as per the terms of the Severance Agreement (as described below).

On January 2, 2006, Actinium entered into an employment agreement with Dragan Cicic, as our, Chief Operating Officer and Chief Medical Officer. The term of the employment agreement is one year; provided that the term shall be automatically extended for successive one year periods thereafter, unless, no later than 60 days prior to the expiration of any successive one-year renewal term, either party thereto provides the other party written notice of its desire not to extend the term. Actinium agreed to pay a base salary of $144,758 per annum during the term with an annual percentage increase of not less than an amount equal to the aggregate preceding 12 months annual percentage increase of the U.S. Department of Labor Consumer Price Index for All Urban Consumers (CPI-U) for the New York area. Mr. Cicic is also entitled to participate in any incentive compensation or bonus program which is instituted or maintained for company executives generally during the term of the agreement.

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On July 21, 2012, Actinium entered into an employment agreement with Enza Guagenti, as our Chief Financial Officer. Ms. Guagenti's employment with the Company is on an "at will" basis, meaning that either Ms. Guagenti or the Company may terminate your employment at any time for any reason or no reason, without further obligation or liability, except that upon termination of Ms. Guagenti's employment by the Company other than for cause Ms. Guagenti will be entitled to severance equal to 3 months base salary. In the event that a) the Company hires a CFO other than yourself, and 2) within two years thereafter Ms. Guagenti's base salary is reduced below $115,000 per year, Ms. Guagenti may then within thirty days after the base salary reduction resign her position with the Company and collect the severance. Actinium agreed to pay an initial base salary of $90,000. Ms. Guagenti's annual base salary will be increased to one hundred fifteen thousand dollars ($115,000) on the six month anniversary of the start date. Thereafter, before the beginning of each calendar year during the term of her employment, beginning in January 2014, the board shall review the amount of Ms. Guagenti's base salary and performance bonus, and shall determine the appropriate adjustments to each component of her compensation for the following calendar year. The Company also agreed to grant to Ms. Guagenti an option grant to purchase 75,000 common shares of the Company. Such options will have an exercise price of $0.261 cents per share which is equal to fair market value as determined by the board on the date of the grant. Two percent (2%) of the options granted shall vest each month after the date of grant until fully vested. The term of all options granted under this Agreement will be for 10 years from the date of initial grant, subject to Ms. Guagenti's continuing service with the Company. On March 9, 2013, Ms. Guagenti resigned as Chief Financial Officer of the Company and Actinium.

Severance Agreement

On February 28, 2013, the Company entered into a Separation and Settlement Agreement with Mr. Talley (the "Separation Agreement"). The Separation Agreement, among other things, provides for a cash payment in two (2) equal installments the aggregate amount of two hundred fifty thousand dollars ($250,000), with the first payment of $125,000 occurring on March 8, 2013 and the second payment of $125,000 occurring on September 1, 2013. The Company will also pay Mr. Talley (i) a discretionary performance bonus of $60,000 for the period of August 15, 2012 to December 31, 2012 and (ii) COBRA continuation coverage under the Company's group health plan for six months. As part of the settlement Mr. Talley agreed to resign as a director from the Company and Actinium. The Separation Agreement also includes, subject to limited exceptions, mutual releases.

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SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table shows the beneficial ownership of our Common Stock as of March 12, 2013 held by (i) each person known to us to be the beneficial owner of more than five percent (5%) of our Common and Preferred Stock; (ii) each director; (iii) each executive officer; and (iv) all directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC, and generally includes voting power and/or investment power with respect to the securities held. Shares of Common Stock subject to options and warrants currently exercisable or which may become exercisable within 60 days of March 12, 2013, are deemed outstanding and beneficially owned by the person holding such options or warrants for purposes of computing the number of shares and percentage beneficially owned by such person, but are not deemed outstanding for purposes of computing the percentage beneficially owned by any other person. Except as indicated in the footnotes to this table, the persons or entities named have sole voting and investment power with respect to all shares of our Common Stock shown as beneficially owned by them.

The percentages below are based on fully diluted shares of our Common Stock equivalents, assuming a 100% share exchange by Actinium shareholders, as of March 12, 2013. On December 28, 2012, the closing date of the share exchange with Actinium, Cactus acquired 21% of the issued and outstanding capital stock of Actinium from the Actinium Shareholders. On March 11, 2012, Cactus acquired an additional 34.5% of the issued and outstanding capital stock of Actinium from the Actinium Shareholders. Unless otherwise indicated, the principal address of each of the persons below is c/o Actinium Pharmaceuticals, Inc., 501 Fifth Avenue, New York, NY 10017.

Executive Officers and Directors	Number of Shares of Common Stock and Preferred Stock Beneficially Owned	Percentage of Ownership(a)
Dragan Cicic, MD	163,037(1)	0.8%
Rosemary Mazanet	48,285(2)	0.2%
David Nicholson	3,996(3)	0.0%
Sandesh Seth	164,365(4)	0.8%
Sergio Traversa	0(5)	0.0%
All Directors and Officers as a Group (7 persons)	379,683	1.8%
All other 5% holders		
AHLB Holdings, LLC. (6) c/o Memorial Sloan-Kettering Cancer Center 1275 York Avenue New York, NY 10065	5,702,387	26.7%

(a) Based on 21,385,573 shares of Common Stock outstanding as of March 12, 2013, and includes 400,000 shares of common stock of the Company that remained outstanding after the closing of the Share Exchange.

(1) Options granted to purchase an aggregate of 414,785 shares of Common Stock of the Company at an exercise price of $0.784 per share and options to purchase an aggregate of 99,900 shares of Common Stock of the Company at an exercise price of $1.50 per share. All shares are subject to vesting. 163,037 shares of Common Stock have vested as of December 28, 2012.

(2) Options granted to purchase an aggregate of 83,250 shares of Common Stock of the Company at an exercise price of $0.784 per share and options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $1.50 per share. All shares are subject to vesting. 48,285 shares of Common Stock have vested as of December 28, 2012.

(3) Options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $0.784 per share and options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $1.50 per share. All shares are subject to vesting. 3,996 shares of Common Stock have vested as of December 28, 2012.

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(4) Warrants to purchase an aggregate of 64,747 shares of Common Stock of the Company at an exercise price of $0.784 per share, exercisable on a cashless basis and warrants to purchase an aggregate of 99,618 of Common Stock of the Company at an exercise price of $0.784 per share, exercisable on a cashless basis issued to Amrosan, LLC, a partnership in which the majority member interest is owned by the family of Mr. Seth. Excludes warrants to purchase an aggregate of 373,442 shares of Common Stock of the Company at par value per share, exercisable on a cashless basis issued to Amrosan, LLC as the warrants are not exercisable upon less than 90 days notice. The holder may waive the 90 day exercise notice requirement by giving 65 days prior notice of such waiver. The shares available by exercise of this Warrant are also restricted and may not be sold or otherwise transferred until the earlier of twelve months from the closing date of the going public transaction; or for six months after the planned Registration Statement is declared effective. Excludes 351,035 warrants issued to Carnegie Hill Asset Partners and irrevocable trust linked to Mr. Seth's family whose terms are the same as those issued to Amrosan, LLC. Also excludes warrants held by the Placement Agent or its affiliates in connection with the offering of common stock and Series A and Series B warrants that closed on December 19, 2012 (the "2012 Offering"), the Bridge Notes Financing, the Series E financing and by designees of Jamess Capital Group, LLC in connection with the going public transaction. Also excludes options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $1.50 per share. All shares are subject to vesting. No shares of Common Stock have vested as of December 28, 2012.

(5) Options to purchase an aggregate of 49,950 shares of Common Stock of the Company at an exercise price of $1.50 per share. No shares of Common Stock have vested as of December 28, 2012.

(6) AHLB Holdings, LLC (AHLB) is wholly owned by MSKCC. AHLB's wholly-owned subsidiary, Actinium Holdings Ltd., a Bermuda corporation ("AHL"), is the record holder of shares of Actinium that will entitle AHL, upon its entry into the Share Exchange Agreement, to acquire 5,702,387 shares of Common Stock (approximately 26.7% of the Common Stock, assuming the consummation of the Share Exchange by all of the stockholders of API). AHL has been struck off the Bermuda Register of Companies and dissolved by the Bermuda authorities for its inadvertent non-payment of annual governmental fees. AHLB has initiated the process of applying for the reinstatement of AHL. Upon such reinstatement, which is anticipated to occur within six to nine weeks (although there can be no assurance in this regard), AHLB intends to cause AHL to enter into the Share Exchange Agreement. Through the anticipated reinstatement of AHL and AHL's entry into the Share Exchange Agreement, AHLB and MSKCC (and AHL, upon its reinstatement) may be deemed to share beneficial ownership of the shares of Common Stock to be acquired by AHL in the Share Exchange. Pending such reinstatement, none of AHLB, MSKCC or AHL is generally entitled to exercise beneficial or other ownership rights with respect to either the shares of Actinium held of record by AHL or the shares of Common Stock that may be issued in the Share Exchange, including the rights to vote or dispose of any such shares. Investment power with respect to the shares of Common Stock that may be acquired by AHL is limited by AHLB's agreement on behalf of AHL, effective as of December 31, 2012, not to transfer shares of Common Stock owned by AHL, subject to exceptions for certain related-party transfers, transfers to trusts and other private transfers, until, in general, the earlier of (i) twelve (12) months from the Closing Date; or (ii) six (6) months following the effective date of the Registration Statement; however, a written "lock-up" agreement has not been finalized as of the date of this filing. AHL will be entitled to certain demand and "piggyback" registration rights with respect to the shares of Common Stock that it may acquire. The shares to be registered by AHL will, however, in certain circumstances, be subject to "cutback" (or reduction of the number of shares includible in an underwritten registration) prior to the "cutback" of the shares being registered on behalf of investors in certain recent private placements of the Company.

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CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Transactions with Related Persons

On January 18, 2001, Actinium entered into a Clinical Trial Agreement with Memorial Sloan-Kettering Cancer Center (MSKCC) and Sloan-Kettering Institute of Cancer Research (SKI), an entity related to MSKCC. Through an indirect subsidiary, Actinium Holdings Ltd. (AHL), MSKCC has been a principal stockholder of the Company since April 2010. The agreement provided for the conduct by SKI/MSKCC of Phase I/II clinical trials of the use of 213Bi-Hu195and cytarabine for the treatment of acute myeloid leukemia and for Actinium's partial sponsorship of the study in exchange for access to data resulting from the study. Actinium was obligated to pay SKI (a) $10,000 for each completed case report on a completed subject, and (b) $2,500 for each case report on an incomplete subject. The trial enrolled 31 patients, was completed in 2007 and all the money due to Memorial Sloan-Kettering Cancer Center (MSKCC) and Sloan-Kettering Institute of Cancer Research ("SKI") were paid in full.

On February 11, 2002, Actinium entered into a License, Development and Commercialization Agreement with SKI. The agreement was amended in August 2006. Pursuant to the agreement, Actinium licenses certain intellectual property from SKI, including critical patents with respect to Actinium's core technology, and also supports ongoing research and clinical development of Actinium related drug candidates. Certain amounts due under this agreement were deferred and then forgiven under the forbearance-related arrangements described below. On June 19, 2011, Actinium nonetheless agreed to pay SKI (a) $50,000 in 2011, (b) $200,000 in 2012 and (c) $250,000 in 2013 under this agreement, in respect of the $50,000 annual maintenance fees and research payments. Since January 1, 2011, the Company has paid $100,000 for 2012 under this Agreement and as of December 31, 2012, the Company agreed to pay an additional $150,000 for research to be conducted in 2013 under this agreemen

On February 25, 2006, Actinium entered into a Clinical Trial Agreement with MSKCC and SKI. The agreement provides for the conduct by SKI/MSKCC of a Phase I clinical trials of the use of Actinium 225-HuM195 for the treatment of advanced myeloid malignancy and for Actinium's partial sponsorship of the study in exchange for access to data resulting from the study. Actinium is obligated to pay SKI (a) $10,000 for each completed case report on a completed subject, and (b) $2,500 for each case report on an incomplete subject. As of December 21, 2012, 18 subjects had been enrolled in this study, and the parties intend to attempt to enroll and additional 3 subjects. The maximum compensation for which Actinium is responsible for under the agreement is $328,000. Since the inception of the trial in 2006, Actinium has paid $180,000 and since January 1, 2011, Actinium has paid $70,000 under the agreement. As of December 31, 2012, no monies were due under this agreement. The trial is ongoing and further fees are likely to be accrued as patients are enrolled. In January and February 2012, two additional patients were treated in this trial. We anticipate enrollment of one more additional patient under this agreement in 2013 and closing the trial after that.

In April 2010, SKI agreed, on behalf of itself and its related or affiliated entities, including MSKCC, to forbear from collecting or otherwise enforcing Actinium's then outstanding obligations to those entities and similar obligations arising during a defined forbearance period. The initial outstanding obligations consisted of approximately $260,000 due under Actinium's license and clinical trials agreements with those entities. In June 2011, SKI agreed to forgive all current and future obligations subject to the forbearance in order to facilitate Actinium's financing efforts. The forbearance period terminated on October 30, 2011, when the Company satisfied a financing condition to the termination of the forbearance period by raising in excess of $3,000.000 in new equity financing. The total amount forgiven was approximately $360,000.

MSKCC agreed, subject to certain conditions, to utilize donated funds for certain clinical and preclinical programs and activities related to Actinium's drug development and clinical study programs, including the payment of certain costs and expenses that would otherwise have been borne by Actinium. The following is a summary of activities

related to the MSKCC arrangements at December 31, 2011 and 2010:

	2012	2011
Qualified R&D costs incurred by Actinium	$ -	$ 655,786
Cash received from MSKCC	237,834	966,341

As of December 31, 2011 and 2010, the Company had reimbursement receivables for costs incurred of $237,834 and $279,401 from MSKCC, respectively. These amounts have since been paid.

From July through October 2011, AHL agreed, in connection with Actinium's Stock offering, to waive its rights to anti-dilution adjustments in respect of its outstanding stock and its preemptive rights to purchase the Company's stock from the Stock Offering. AHL also agreed to the restructuring of its registration rights in favor of the private placement purchasers, the amendment of the stockholders agreement of Actinium (to permit, among other transactions, the share exchange) and the relinquishment of its rights to Board representation, although one director originally nominated by AHL continued to serve. Actinium agreed (i) not to reduce the indemnification, advancement of expenses and similar rights of present and former directors and officers of Actinium, (ii) until April 30, 2016 to maintain directors' and officers' liability insurance at least in the same manner and to the same extent as then in effect, and (iii) following any merger, asset transfer and certain other transactions to provide for the parity of such directors and officers in respect of indemnification, advancement of expenses and D&O liability insurance with such rights applicable to the non-continuing directors following such transactions.

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On March 27, 2012, Actinium entered into an additional clinical trial agreement with Memorial Sloan-Kettering Cancer Center with respect to conducting a Phase I/II trial of combination therapy of low dose cytarabine and fractionated dose of Lintuzumab-Ac225. Actinium will pay $31,185 for each patient that has completed the clinical trial. Upon execution of the agreement, Actinium was required to pay a start-up fee of $79,623, which was paid on July 10, 2012. The total number of patients anticipated to be enrolled at MSKCC in this trial is 15.

Effective as of December 31, 2012, AHLB agreed on behalf of AHL not to transfer shares of Common Stock held by AHL, subject to exceptions for certain related-party transfers, transfers to trusts and other private transfers, until, in general, the earlier of (i) twelve (12) months from the Closing Date; or (ii) six (6) months following the effective date of the Registration Statement; however, a written “lock-up” agreement has not been finalized as of the date of this filing. AHL will be entitled to certain demand and “piggyback” registration rights with respect to the shares of Common Stock that it may acquire. The shares to be registered by AHL will, however, in certain circumstances, be subject to “cutback” (or reduction of the number of shares includible in an underwritten registration) prior to the “cutback” of the shares being registered on behalf of investors in certain recent private placements.

On January 1, 2012, Actinium entered into a Consulting Services Agreement with Dr. Rosemary Mazanet, a director of Cactus. Pursuant to the agreement, Dr. Mazanet is to provide, among other things, consulting services in the areas of implementation of the Actimab trial including all aspects of study initiation until first patient in at each clinical site. Dr. Mazanet receives compensation of $100,000 per year and may receive additional compensation in the form of options at determined by the board of Actinium. Since January 1, 2011, Dr. Mazanet has received options to purchase 225,000 shares of common stock of Actinium.

On August 7, 2012, Actinium entered into an engagement agreement with the Laidlaw & Company (UK) Ltd. (the “Placement Agent”) for the 2012 Offering, of which Mr. Seth, a director of Cactus Ventures, Inc. is Head of Healthcare Investment Banking. Pursuant to the agreement, the Placement Agent was engaged as the exclusive agent for the 2012 Offering of the Units by Actinium. None of Cactus’ current officers or directors had a prior relationshi