Arch Therapeutics, Inc.
Form S-1/A
May 05, 2014

No. 333-194745

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1

to

FORM S-1

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ARCH THERAPEUTICS INC.

(Exact name of registrant as specified in its charter)

Nevada	**3841**	**46-0524102**
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

20 William St., Suite 270

Wellesley, MA 02481

(617) 475-5254

(Address, including zip code, and telephone number, including

area code, of registrant’s principal executive offices)

Terrence W. Norchi

President and Chief Executive Officer

20 William St., Suite 270

Wellesley, MA 02481

(617) 475-5254

(Name, address, including zip code, and telephone number, including

area code, of agent for service)

With Copies to:

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Morrison & Foerster LLP

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San Diego, California 92130

(858) 720-5100

Approximate date of commencement of proposed sale to the public: As soon as possible after the effective date hereof.

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. x

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 12b-2 of the Exchange Act. (Check one):

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

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 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling securityholders named herein 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.

SUBJECT TO COMPLETION, DATED May 5, 2014

ARCH THERAPEUTICS, INC.

PROSPECTUS

Up to 60,648,000 Shares of Common Stock

This prospectus relates to the offering and resale by the selling securityholders of Arch Therapeutics, Inc. named herein of up to 60,648,000 shares of common stock, par value $0.001 per share. These shares include 11,400,000 issued and outstanding shares of common stock, 11,400,000 shares of common stock currently underlying Series A warrants, 11,400,000 shares of common stock currently underlying Series B warrants and 11,400,000 shares of common stock currently underlying Series C warrants, all issued and sold in a private placement offering completed in February 4, 2014 (the "Private Placement Financing"), as well as such number of additional shares of common stock to register an aggregate of 133% of the total number of shares issued and currently underlying warrants issued in the Private Placement Financing. The common stock sold in the Private Placement Financing was sold at a purchase price of $0.25 per share, and the related warrants authorize the holders thereof to purchase shares of common stock at an exercise price of $0.30 per share for the Series A warrants, which are exercisable immediately upon issuance and expire five years thereafter; $0.35 per share for the Series B warrants, which are exercisable immediately upon issuance and expire on the earlier of 12 months thereafter and six months after the effective date of this registration statement; and $0.40 per share for the Series C warrants, which are exercisable immediately upon issuance and expire on the earlier of 18 months thereafter and nine months after the effective date of this registration statement, all as further described in this prospectus.

The selling securityholders may sell the shares of common stock to be registered hereby from time to time on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale, in the over-the-counter market, in one or more transactions otherwise than on these exchanges or systems or in the over-the-counter market, such as privately negotiated transactions, or using a combination of these methods, and at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. See the disclosure under the heading "Plan of Distribution" in this prospectus for more information.

We will not receive any proceeds from the sale of common stock by the selling securityholders.

Our common stock is traded on the QB tier of the OTC Marketplace ("OTCQB") under the symbol "ARTH". On May 1, 2014, the closing price of our common stock was $0.28 per share.

We originally offered and sold the securities issued in the Private Placement Financing under an exemption from the registration requirements of the Securities Act of 1933, as amended (the "Securities Act"), pursuant to Section 4(a)(2) thereof and Rule 506 of Regulation D promulgated thereunder.

Investing in our common stock involves a high degree of risk. Before making any investment in our common stock, you should read and carefully consider the risks described in this prospectus under "Risk Factors" beginning on page 9 of this prospectus.

You should rely only on the information contained in this prospectus or any prospectus supplement or amendment thereto. We have not authorized anyone to provide you with different information.

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.

This prospectus is dated , 2014

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About This Prospectus

You should rely only on the information that we have provided or incorporated by reference in this prospectus, any applicable prospectus supplement and any related free writing prospectus that we may authorize to be provided to you. We have not authorized anyone to provide you with different information. No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus, any applicable prospectus supplement or any related free writing prospectus that we may authorize to be provided to you. You must not rely on any unauthorized information or representation. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. You should assume that the information in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security registered under the registration statement of which this prospectus is a part.

This prospectus contains summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated by reference as exhibits to the registration statement of which this prospectus is a part, and you may obtain copies of those documents as described below under the heading "Where You Can Find More Information."

As used in this prospectus, unless the context indicates or otherwise requires, the "Company", "we", "us", and "our" refer to Arch Therapeutics, Inc., a Nevada corporation, and its consolidated subsidiary, and the term "ABS" refers to Arch Biosurgery, Inc., a private Massachusetts corporation that, through a reverse merger acquisition completed on June 26, 2013, has become our wholly owned subsidiary.

On May 24, 2013, we effected a forward stock split, by way of a stock dividend, of our issued and outstanding shares of common stock at a ratio of 11 shares to each one issued and outstanding share. Unless the context indicates or otherwise requires, all share numbers and share price data included in this prospectus have been adjusted to give effect to that stock split.

We have pending trademark applications for AC5 Surgical Hemostatic Device™, AC5™, Crystal Clear Surgery™, NanoDrape™ and NanoBioBarrier™. All other trademarks, trade names and service marks included in this prospectus are the property of their respective owners.

SUMMARY

This summary does not contain all of the information that should be considered before investing in our common stock. Investors should read the entire prospectus carefully, including the more detailed information regarding our business, the risks of purchasing our common stock discussed in this prospectus under "Risk Factors" beginning on page 9 of this prospectus and our consolidated financial statements and the accompanying notes beginning on page F-1 of this prospectus.

Our Company

We are a life science medical device company in the development stage with limited operations to date. We aim to develop products that make surgery and interventional care faster and safer by using a novel approach that stops bleeding (referenced as "hemostasis"), controls leaking (referenced as "sealant"), and provides other advantages during surgery and trauma care. Our core technology is based on a self-assembling peptide solution that creates a physical, mechanical barrier, which could be applied to seal organs or wounds that are leaking blood and other fluids. We believe our technology could support an innovative platform of potential products in the field of stasis and barrier applications. Our lead product candidate, AC5 Surgical Hemostatic Device™ (which we sometimes refer to as "AC5™"), is designed to achieve hemostasis in minimally invasive and open surgical procedures, and we hope to develop other hemostatic or sealant product candidates in the future based on our self-assembling peptide technology platform. Our plan and business model is to develop products that apply that core technology to use with human bodily fluids and connective tissues.

AC5 is designed to be a biocompatible synthetic peptide comprising naturally occurring amino acids. When applied to a wound, AC5 intercalates into the interstices of the connective tissue where it self-assembles into a physical, mechanical structure that provides a barrier to leaking substances, such as blood. AC5 is designed for direct application as either a liquid or a spray, which we believe will make it user-friendly and able to conform to irregular wound geometry. Additionally, AC5 is not sticky or glue-like, which we believe will enhance its utility in the setting of minimally invasive and laparoscopic surgeries. Further, AC5 is transparent, which should make it easier for surgeons or other healthcare providers to maintain a clear field of vision during a surgical procedure and prophylactically stop bleeding as it starts, which we call Crystal Clear Surgery™.

We currently have no products that have obtained marketing approval in any jurisdiction, we have not generated revenues since inception and do not expect to do so in the foreseeable future due to the early stage nature of our current product candidates, we had net losses for the year ended September 30, 2013 and for the three months ended December 31, 2013 of $1,853,791, $808,441, respectively, and we had an accumulated deficit as of September 30, 2013 of $4,631,871. To date, we have financed our operations primarily through funding received from private placement equity offerings, such as the Private Placement Financing, and under a loan agreement. We have devoted much of our operations to date to the development of our core technology, including selecting our lead product

composition, conducting initial safety and other related tests, generating scale-up, reproducibility and manufacturing and formulation methods, and developing and protecting the intellectual property rights underlying our technology platform.

For more information regarding our business, see the disclosure under the headings “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business” included elsewhere in this prospectus. For a description of certain risks related to our business, see the disclosure under the heading “Risk Factors” beginning on page 8 of this prospectus.

Private Placement Financing

On January 30, 2014, we entered into a securities purchase agreement (the “Securities Purchase Agreement”) with nine accredited investors providing for our issuance and sale to such investors, in a private placement, of an aggregate of 11,400,000 shares of our common stock at a purchase price of $0.25 per share and three series of warrants, the Series A warrants, the Series B warrants and the Series C warrants, to purchase up to an aggregate of 34,200,000 shares of our common stock (collectively, the “Warrants”), for aggregate gross proceeds to us of $2.85 million (the “Private Placement Financing”). The Private Placement Financing closed on February 4, 2014.

Upon the closing of the Private Placement Financing, we issued to each investor therein a Series A warrant, a Series B warrant and a Series C warrant, each to purchase up to a number of shares of our common stock equal to 100% of the shares of common stock purchased by such investor in the Private Placement Financing. The Series A warrants have an exercise price of $0.30 per share, are exercisable immediately upon their issuance and have a term of exercise equal to five years after their issuance date. The Series B warrants have an exercise price of $0.35 per share, are exercisable immediately upon their issuance and have a term of exercise equal to the shorter of 12 months after their issuance date and six months after the first date on which the resale of all Registrable Securities (as defined in the Securities Purchase Agreement) is covered by one or more effective registration statements. The Series C warrants have an exercise price of $0.40 per share, are exercisable immediately upon their issuance and have a term of exercise equal to the shorter of 18 months after their issuance date and nine months after the first date on which the resale of all Registrable Securities (as defined in the Securities Purchase Agreement) is covered by one or more effective registration statements. The number of shares of our common stock into which each of the Warrants is exercisable and the exercise price therefor are subject to adjustment as set forth in the Warrants, including, without limitation, adjustment to the exercise price of the Warrants in the event of certain subsequent issuances and sales of shares of our common stock (or securities convertible or exercisable into shares of our common stock) at a price per share lower than the then-effective exercise price of the Warrants, in which case the exercise price of the Warrants will be adjusted to equal such lower price per share, as well as customary adjustments in the event of stock dividends and splits, subsequent rights offerings and pro rata distributions to our common stockholders. The Warrants also provide that they shall not be exercisable in the event and to the extent that the exercise thereof would result in the holder of the Warrant or any of its affiliates beneficially owning more than 4.9% of our common stock.

Also upon the closing of the Private Placement Financing, we entered into a registration rights agreement (the "Registration Rights Agreement") with the investors in the financing, pursuant to which we became obligated to file with the Securities and Exchange Commission (the "SEC") on or before March 21, 2014 one or more registration statements to register for resale under the Securities Act (i) the shares of common stock issued and underlying the Warrants issued in the Private Placement Financing, plus (ii) an additional number of shares of common stock equal to 33% of the total number of shares of common stock issued and underlying the Warrants issued in the Private Placement Financing, to account for adjustments, if any, to the number of shares underlying the Warrants as provided therein and as described above. As a result, we are registering for resale under this registration statement the 45,600,000 shares of common stock issued and underlying the Warrants issued in the Private Placement Financing, together with an additional 15,048,000 shares of common stock that may never become issuable by us if no such adjustments occur. Pursuant to our filing of this registration statement, we are in compliance with such filing obligation under the registration rights agreement. Our failure to satisfy certain other deadlines with respect to this registration statement, including with respect to the effectiveness hereof, and certain other requirements set forth in the registration rights agreement may require us to pay monetary penalties.

Under the Registration Rights Agreement, subject to exception in certain circumstances, we have agreed to keep this registration statement effective until the earlier of the date on which all shares of common stock to be registered hereunder have been sold or may be sold without restriction pursuant to Rule 144 promulgated under the Securities Act ("Rule 144"). If there is not an effective registration statement covering the resale of any of the shares to be registered hereunder at any time during the period required by the Registration Rights Agreement, then the selling securityholders will have "piggyback" registration rights with respect to any such shares that are not eligible for resale pursuant to Rule 144 in connection with any other registration statement we determine to file that would permit the inclusion of those shares.

The terms of the Securities Purchase Agreement we entered into with the investors in the Private Placement Financing provide that, among other things: during the period commencing on January 30, 2014 and ending on the 90-day anniversary of the first date on which all the Registrable Securities (as defined in the Securities Purchase Agreement) are covered by one or more effective registration statements, we may not offer, sell or issue any securities, except for equity awards granted to service providers and securities issued in connection with certain types of strategic transactions; during the period commencing on January 30, 2014 and ending on the six-month anniversary of the first date on which all the Registrable Securities (as defined in the Securities Purchase Agreement) are covered by one or more effective registration statements, such investors shall have certain notice and participation rights with respect to offers and sales of securities that we may pursue; and until the earlier of the 12-month anniversary of the first date on which all the Registrable Securities (as defined in the Securities Purchase Agreement) are covered by one or more effective registration statements and the date on which all such investors have sold all of the shares of common stock to be registered hereunder, we may not effect or enter into an agreement for the issuance and sale of securities at a future-determined price or with a conversion or exercise price that varies with the trading price of our common stock or is subject to reset following the date of such issuance. In addition, the Securities Purchase Agreement contains provisions that would obligate us to make certain payments to the investors thereunder if we or our transfer agent were to fail to timely remove certain restrictive legends from certificates representing the shares of common stock being offered hereby following the eligibility of such shares for resale under this registration statement or Rule 144.

On the date of our entry into the Securities Purchase Agreement, the Series A warrants and Series B warrants had an exercise price lower than the market value of our common stock, which closed at $0.38 on the OTCQB, resulting in an aggregate discount to the market price of our common stock of $912,000 for the Series A warrants and $342,000 for the Series B warrants on that date. The Series C warrants were issued with an exercise price higher than the market value of our common stock on the date of our entry into the Securities Purchase Agreement, and therefore did not have any discount to the market price of our common stock as of such date. The tables below indicate the total possible discount to the market price of our common stock as of January 30, 2014 for the shares of our common stock underlying the Series A warrants and the Series B warrants, as well as similar information for the Series C warrants. The last trading price of our common stock on the OTCQB on February 4, 2014, the date of the closing of the Private Placement Financing, was $0.30. As a result, as of such date, there was no discount to the market price of our common stock for the Series A warrants, Series B warrants or Series C warrants. Additionally, all of the Warrants have an exercise price that is higher than the closing price of our common stock on May 1, 2014, which closed at $0.28 on such date.

Series A Warrants

Market price per share of our common stock on January 30, 2014, the date of the Securities Purchase Agreement:	$0.38
Exercise price per share of the Series A warrants on the date of issuance and as of the date of this prospectus:	$0.30
Total possible shares of common stock underlying the Series A warrants on the date of issuance and as of the date of this prospectus:	11,400,000
Aggregate market price of all shares of common stock underlying the Series A warrants, based on the market price of our common stock on January 30, 2014:	$4,332,000
Aggregate exercise price of all shares of common stock underlying the Series A warrants, based on the exercise price on the date of issuance and as of the date of this prospectus:	$3,420,000
Total possible discount of the exercise price of the Series A warrants to the market price of our common stock as of January 30, 2014:	$912,000

Series B Warrants

Market price per share of our common stock on January 30, 2014, the date of the Securities Purchase Agreement:	$ 0.38
Exercise price per share of the Series B warrants on the date of issuance and as of the date of this prospectus:	$ 0.35

Total possible shares of common stock underlying the Series B warrants on the date of issuance and as of the date of this prospectus:	11,400,000
Aggregate market price of all shares of common stock underlying the Series B warrants, based on the market price of our common stock on January 30, 2014:	$ 4,332,000
Aggregate exercise price of all shares of common stock underlying the Series B warrants, based on the exercise price on the date of issuance and as of the date of this prospectus:	$ 3,990,000
Total possible discount of the exercise price of the Series B warrants to the market price of our common stock as of January 30, 2014:	$ 342,000

Series C Warrants

Market price per share of our common stock on January 30, 2014, the date of the Securities Purchase Agreement:	$ 0.38
Exercise price per share of the Series B warrants on the date of issuance and as of the date of this prospectus:	$ 0.40
Total possible shares of common stock underlying the Series C warrants on the date of issuance and as of the date of this prospectus:	11,400,000
Aggregate market price of all shares of common stock underlying the Series C warrants, based on the market price of our common stock on January 30, 2014:	$ 4,332,000
Aggregate exercise price of all shares of common stock underlying the Series C warrants, based on the exercise price on the date of issuance and as of the date of this prospectus:	$ 4,560,000

We did not engage any underwriter or placement agent in connection with the Private Placement Financing. We also have made no payments, in cash or equity, to any of the selling securityholders in connection with this offering, except that we have reimbursed, or have agreed to reimburse, Cranshire Capital Master Fund, Ltd. ("Cranshire Master Fund"), one of the selling securityholders named herein, an aggregate cash amount of up to $35,000 for costs and expenses incurred by it or its affiliates in connection with the transactions contemplated by the Private Placement Financing and the registration of the securities being registered hereby.

After deducting for the expense reimbursement to Cranshire Master Fund, the net proceeds to us from the Private Placement Financing were approximately $2.815 million. The table below describes in more detail these costs associated with the Private Placement Financing:

Gross proceeds of the Private Placement Financing:	$ 2,850,000	(1)
Total potential payment to Cranshire Master Fund as expense reimbursement:	$ 35,000	(2)
Resulting net proceeds to the Company:	$ 2,815,000	(3)
Total possible profit to be realized by the selling securityholders as a result of any exercise discounts underlying the Series A warrants and the Series B warrants:	$ 1,254,000	(4)

(1)

Does not include the potential gross proceeds payable to us upon exercise of the Warrants issued in connection with the Private Placement Financing, which could equal up to $11,970,000.

(2) This amount includes $25,000 that was withheld from the purchase price paid to us by Cranshire Master Fund for the securities it purchased in the Private Placement Financing, and up to $10,000 that we have agreed to pay to Cranshire Master Fund as additional expense reimbursement. This amount does not include our fees and expenses associated with the Private Placement Financing, including our legal fees and registration fees, estimated to total $188,047. This amount also does not include additional payments that we may be required to make under certain circumstances but that are not currently determinable, including (a) potential partial damages for failure to register the common stock issued or issuable upon exercise of the Warrants (in a cash amount equal to 1% of the price paid to us by each investor in the Private Placement Financing on the date of and on each 30-day anniversary of such failure until the cure thereof); (b) amounts payable if we and our transfer agent fail to timely remove certain restrictive legends from certificates representing shares of common stock issued in the Private Placement Financing or issuable upon exercise of the Warrants; and (c) payments in respect of claims for which we provide indemnification.

(3) Calculated by subtracting the total possible and currently determinable cash payments to selling securityholders or their affiliates from the gross proceeds to us from the Private Placement Financing.

(4) Calculated by adding the total possible discount of the exercise prices of the Series A warrants and the Series B warrants to the market price of our common stock as of January 30, 2014, as reflected in the tables set forth above.

Corporate Information

We were incorporated under the laws of State of Nevada on September 16, 2009 as Almah, Inc. On May 10, 2013, we entered into an Agreement and Plan of Merger (the “Merger Agreement”) with Arch Biosurgery, Inc. (“ABS”) and Arch Acquisition Corporation, our wholly owned subsidiary formed for the purpose of the transaction, pursuant to which Arch Acquisition Corporation merged with and into ABS and ABS thereby became our wholly owned subsidiary (the “Merger”). The Merger closed on June 26, 2013. In contemplation of the Merger, we changed our name from Almah, Inc. to Arch Therapeutics, Inc. Our principal executive offices are located at 20 William St., Suite #270, Wellesley, Massachusetts 02481. The telephone number of our principal executive offices is (617) 475-5254. Our website address is http://www.archtherapeutics.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this document.

ABS was incorporated under the laws of the Commonwealth of Massachusetts on March 6, 2006 as Clear Nano Solutions, Inc. On April 7, 2008, ABS changed its name to Arch Therapeutics, Inc., and on June 26, 2013, ABS changed its name from Arch Therapeutics, Inc. to Arch Biosurgery, Inc.

Prior to the completion of the Merger, we were a “shell company” under applicable rules of the SEC, and had no or nominal assets or operations. Upon the closing of the Merger, we abandoned our prior business plan and began pursuing, as our sole business, our current business as a life science medical device company.

The Offering

This prospectus relates to the resale from time to time by the selling securityholders identified in this prospectus of up to 60,648,000 shares of our common stock issued or underlying the Warrants issued in the Private Placement Financing. None of the shares to be registered hereby are being offered for sale by us.

Common stock outstanding prior to offering	72,076,487 (1)
Common stock offered by the selling securityholders	45,600,000 (2)
Common stock to be outstanding after the offering	106,276,487 (3)
Use of proceeds	We will not receive any proceeds from the sale of common stock offered by the selling securityholders under this prospectus.
OTCQB symbol	“ARTH”
Risk Factors	See “Risk Factors” beginning on page 9 and other information in this prospectus for a discussion of the factors you should consider before you decide to invest in our common stock and warrants.

(1) As of May 1, 2014. Includes 11,400,000 shares of our common stock issued to the selling securityholders in the Private Placement Financing. Includes 18,637,849 shares of common stock held by our affiliates.

(2) Consists of: (a) 11,400,000 issued and outstanding shares of common stock, (b) an aggregate of 34,200,000 shares of common stock issuable upon exercise of the Warrants as of the date of this prospectus, and (c) an additional 15,048,000 shares of common stock being registered hereunder to account for adjustments, if any, to the number of shares underlying the Warrants. We may not be required to make any such adjustment to the number of shares underlying the Warrants and, as a result, such additional shares may never become issuable by us.

(3) Assumes (a) no adjustments to the number of shares underlying the Warrants, and (b) the full exercise of the Warrants, resulting in the issuance of 34,200,000 shares of common stock. Excludes (a) 10,231,197 shares of common stock that are reserved for future issuance under our 2013 Stock Incentive Plan (the “2013 Plan”), of which 6,869,212 shares are subject to outstanding option awards granted under the 2013 Plan at exercise prices ranging from $0.19 to $0.40 per share and with a weighted average exercise price of $0.37 per share, and (b) 4,145,985 shares of common stock issuable upon the exercise of outstanding warrants issued in transactions unrelated to the Private Placement

Financing, with exercise prices ranging from $0.274 to $0.75 per share, none of which are being registered pursuant to the registration statement of which this prospectus forms a part.

RISK FACTORS

Investment in our common stock involves a high degree of risk. You should carefully consider the following risk factors before making an investment decision. If any of the following risks and uncertainties actually occurs, our business, financial condition, and results of operations could be negatively impacted and you could lose all or part of your investment.

Risks Related to our Business

We have incurred significant losses since inception. We expect to continue to incur losses for the foreseeable future as we pursue our operations as a combined enterprise, and we may never generate revenue or achieve or maintain profitability.

We have incurred losses in each year since our inception and we expect that losses will continue to be incurred in the foreseeable future in the operation of our business. To date, we have financed our operations entirely through equity and debt investments by founders, other investors and third parties, and we expect to continue to rely on these sources of funding, to the extent available in the foreseeable future. Losses from operations have resulted principally from costs incurred in research and development programs and from general and administrative expenses, including significant costs associated with establishing and maintaining intellectual property rights, significant legal and accounting costs pertaining to the closing of the Merger and related regulatory filings, and personnel expenses. We have devoted substantially all of our time, money and efforts to date to the advancement of our technology and raising capital to support our business, and expect to continue to devote significant time, money and efforts to such activities going forward.

We expect to continue to incur significant expenses and we anticipate that those expenses and losses may increase in the foreseeable future as we seek to:

- develop our principal product candidate, AC5, including further development of the product's composition and conducting preclinical biocompatibility studies;
- raise capital needed to fund our operations;
- build and enhance investor relations and corporate communications capabilities;
- conduct clinical trials relating to AC5 and any other product candidate we seek to develop;
- attempt to gain regulatory approvals for any product candidate that successfully completes clinical trials;
- establish relationships with contract manufacturing partners, and invest in product and process development through such partners;
- maintain, expand and protect our intellectual property portfolio;

- advance additional candidates through our research and development pipeline;
- seek to commercialize selected product candidates for which we may obtain regulatory approval;
- hire additional regulatory, clinical, quality control, scientific, financial, and management consultants and personnel; and
- support and add operational, financial, accounting, facilities engineering and information systems consultants and personnel to further our operations.

To become and remain profitable, we must succeed in developing and eventually commercializing product candidates with significant market potential. This will require us to be successful in a number of challenging activities, including successfully completing preclinical testing and clinical trials of product candidates, obtaining regulatory approval for our product candidates and manufacturing, marketing and selling any products for which we may obtain regulatory approval. We are only in the preliminary stages of the earliest of those activities. We may never succeed in those activities and may never generate operating revenues or achieve profitability. Even if we do generate operating revenues sufficient to achieve profitability, we may not be able to sustain or increase profitability. Our failure to generate operating revenues or become and remain profitable would impair our ability to raise capital, expand our business or continue our operations, all of which would depress the price of our common stock. A decline in the prices of our common stock could cause our stockholders to lose all or a part of their investment in the Company.

There is substantial doubt about our ability to continue as a going concern.

We have not generated any revenue from operations since inception, and we have incurred substantial net losses to date. Further, our operating expenses will likely increase in the foreseeable future, as we seek to increase operations as a life sciences medical device company. Moreover, our cash position is vastly inadequate to support our business plans and substantial additional funding will be needed in order to pursue those plans, which include research and development of our primary product candidate, seeking regulatory approval for that product candidate, and pursuing its commercialization in the U.S., Europe and other markets. Those circumstances raise substantial doubt about our ability to continue as a going concern.

We will need substantial additional funding and may be unable to raise capital when needed, which would force us to delay, reduce or eliminate our product development programs or commercialization efforts and could cause our business to fail.

We are a development stage company with no commercial products. Our primary product candidate is in the process of being developed, and will require significant additional clinical development and additional investment before it could potentially be commercialized. We anticipate that none of our product candidates will be commercially available for several years, if at all.

We believe that our current cash and cash equivalents on hand will be sufficient to meet our anticipated cash requirements through October 2014; however, based on our current operating expenses and working capital requirements, we do not currently believe our existing cash resources are sufficient to meet our anticipated needs for the next twelve months. In addition to the funds raised from our equity financings and debt financings, we will require additional financing to fund our planned future operations, including the continuation of our ongoing research and development efforts, seeking to license or acquire new assets, and researching and developing any potential patents, the related compounds and any further intellectual property that we may acquire. In addition, our plans may change and/or we may use our capital resources more rapidly than we currently anticipate. We presently expect that our expenses will increase in connection with our ongoing activities, particularly as we commence preclinical and clinical development for our lead product candidate, AC5, and that we will need to raise significant additional funds to continue operations. Our future capital requirements will depend on many factors, including:

- the scope, progress and results of our research and preclinical development activities;
- the scope, progress, results, costs, timing and outcomes of any clinical trials conducted for any of our product candidates;
- the timing of entering into, and the terms of, any collaboration agreements with third parties relating to any of our product candidates;
- the timing of and the costs involved in obtaining regulatory approvals for our product candidates;
- the costs of operating, expanding and enhancing our operations to support our clinical activities and, if our product candidates are approved, commercialization activities;
- the costs of maintaining, expanding and protecting our intellectual property portfolio, including potential litigation costs and liabilities;
- the costs associated with maintaining and expanding our product pipeline;
- the costs associated with expanding our geographic focus;
- operating revenues, if any, received from sales of our product candidates, if any are approved by the U.S. Food and Drug Administration ("FDA") or other applicable regulatory agencies;
- the cost associated with being a public company, including obligations to regulatory agencies, investor relations, and corporate communications;
- the costs of additional general and administrative personnel, including accounting and finance, legal and human resources employees; and
- operating revenues, if any, received from sales of our product candidates, if any are approved by the FDA or other applicable regulatory agencies.

As a result of these and other factors, we expect that we will need substantial additional funding in the future. We would likely seek such funding through public or private securities offerings, incurrence of indebtedness, or some combination of those sources. We may also seek funding through collaborative arrangements if we determine them to be necessary or appropriate, although these arrangements could require us to relinquish rights to our technology or product candidates and could result in our receipt of only a portion of any revenues associated with the partnered product. Additional funding may not be available from any of these sources when needed on acceptable terms, or at all. In addition, we are bound by certain terms and obligations that may limit or otherwise impact our ability to raise additional funding in the near-term, including restrictions in our loan agreement on our ability to incur certain types of additional indebtedness, discussed in further detail in these Risk Factors below, and certain terms of the Private Placement Financing, including those discussed in these Risk Factors below. These restrictions and provisions could make it more challenging for us to raise capital through the incurrence of additional debt or through future equity issuances. Further, if we do raise capital through the sale of equity, or securities convertible into equity, the ownership of our then existing stockholders would be diluted, which dilution could be significant depending on the price at which we may be able to sell our securities. Also, if we raise additional capital through the incurrence of indebtedness, we may become subject to additional covenants restricting our business activities, and the holders of debt instruments may have rights and privileges senior to those of our equity investors. In addition, servicing the interest and principal repayment obligations under debt facilities could divert funds that would otherwise be available to support research and development, clinical or commercialization activities.

If we are unable to obtain adequate financing on a timely basis or on acceptable terms in the future, we would likely be required to delay, reduce or eliminate one or more of our product development activities, which could cause our business to fail.

The terms of the Private Placement Financing could impose additional challenges on our ability to raise funding in the future.

The Securities Purchase Agreement related to the Private Placement Financing imposes certain restrictions on our ability to issue equity or debt securities, including the following: during the period commencing on January 30, 2014 and ending on the 90-day anniversary of the first date on which all the Registrable Securities (as defined in the Securities Purchase Agreement) are covered by one or more effective registration statements, we may not offer, sell or issue any securities, except for equity awards granted to service providers and securities issued in connection with certain types of strategic transactions; during the period commencing on January 30, 2014 and ending on the six-month anniversary of the first date on which all the Registrable Securities (as defined in the Securities Purchase Agreement) are covered by one or more effective registration statements, such investors shall have certain notice and participation rights with respect to offers and sales of securities that we may pursue; and until the earlier of the 12-month anniversary of the first date on which all the Registrable Securities (as defined in the Securities Purchase Agreement) are covered by one or more effective registration statements and the date on which all such investors have sold all of the shares of common stock to be registered hereunder, we may not effect or enter into an agreement for and VRT, where a "VRT" is a transaction in which we (i) issue convertible securities at (A) a conversion, exercise or exchange rate or other price that is based upon and/or varies with the trading prices of, or quotations for, the shares of our common stock at any time after the initial issuance of such convertible securities, or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such convertible securities or upon the occurrence of specified or contingent events directly or indirectly related to our business or the market for the common stock, other than pursuant to a customary "weighted average" anti-dilution provision or (ii) enter into any agreement whereby we or any subsidiary may sell securities at a future determined price. In addition, the Warrants contain certain anti-dilution protections that adjust downward the exercise price of the Warrants in the event we offer, sell and issue securities at a lower consideration price per share than the then-effective exercise price of the Warrants. Those provisions could make our securities less attractive to investors and could limit our ability to obtain adequate financing on a timely basis or on acceptable terms in the future, which could have harmful effects on our financial condition and operations. Additionally, certain of those provisions could dilute the ownership interests of our other current common stockholders.

Our current and any future debt facilities will require us to use our limited capital to repay amounts owed and may impose limitations on our operations, which could negatively affect our business plans.

On September 30, 2013, we entered into the Life Sciences Accelerator Funding Agreement (the "MLSC Loan Agreement") with the Massachusetts Life Sciences Center ("MLSC"), pursuant to which MLSC has provided us an unsecured subordinated loan in principal amount of $1,000,000 (such loan, the "MLSC Loan"). The MLSC Loan bears interest at a rate of 10% per annum, and will become fully due and payable on the earlier of (i) September 30, 2018,

(ii) the occurrence of an event of default under the MLSC Loan Agreement, or (iii) the completion of a sale of substantially all of our assets, a change-of-control transaction or one or more financing transactions in which we receive net proceeds of $5,000,000 or more in a 12-month period. We will need substantial amounts of cash in order to repay the principal and interest owed under the MLSC Loan as it becomes due, which we may not have or be able to obtain. Any failure to make payments as required under the MLSC Loan Agreement would constitute an event of default, and could result in, among other things, MLSC's acceleration of all amounts due thereunder.

Further, the MLSC Loan Agreement restricts our use of the proceeds of the MLSC Loan to funding working capital requirements and/or the purchase of capital assets in the life sciences field, and we are expressly prohibited from using any such proceeds for any severance payment, investment in certain securities or payment for goods or services to a related party of the Company. Additionally, the MLSC Loan Agreement provides that, for so long as any of the MLSC Loan remains outstanding, our headquarters and at least a majority of our employees must be located in Massachusetts and we must not take certain actions without obtaining MLSC's prior consent, including without limitation paying dividends on our capital stock, redeeming any of our outstanding securities, and completing a sale of substantially all of our assets or a change-of-control transaction. Further, our failure to remain a "certified life sciences company" under the Massachusetts General Law would constitute an event of default under the MLSC Loan Agreement. Our ability to pursue our business plans during the term of the MLSC Loan may be severely limited as a result of those restrictions, which could cause our operations and financial condition to suffer.

In addition, the MLSC Loan agreement restricts our ability, without the prior written consent of MLSC, to incur certain types and amounts of additional indebtedness, including indebtedness senior or, in certain circumstances, equal to the MLSC Loan and any indebtedness to any of our stockholders or employees that is not expressly subordinated to the MLSC Loan. Our ability to finance our operations could be limited if, while the MLSC Loan is outstanding, the only source of capital available to us is prohibited by the restrictions set forth in the MLSC Loan Agreement, in which case we may be forced to curtail or eliminate some or all of our operations.

Our short operating history may hinder our ability to successfully meet our objectives.

We are a development stage company subject to the risks, uncertainties and difficulties frequently encountered by early-stage companies in evolving markets. Our operations to date have been primarily limited to organizing and staffing, developing and securing our technology and undertaking or funding preclinical studies of our lead product candidate. We have not demonstrated our ability to successfully complete large-scale, pivotal clinical trials, obtain regulatory approvals, manufacture a commercial scale product or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization.

Because of our limited operating history, we have limited insight into trends that may emerge and affect our business, and errors may be made in developing an approach to address those trends and the other challenges faced by development stage companies. Failure to adequately respond to such trends and challenges could cause our business, results of operations and financial condition to suffer or fail. Further, our limited operating history may make it difficult for our stockholders to make any predictions about our likelihood of future success or viability.

If we are not able to attract and retain qualified management and scientific personnel, we may fail to develop our technologies and product candidates.

Our future success depends to a significant degree on the skills, experience and efforts of the principal members of our scientific and management personnel. These members include Dr. Terrence Norchi, MD, our President and Chief Executive Officer. The loss of Dr. Norchi or any of our other key personnel could harm our business and might significantly delay or prevent the achievement of research, development or business objectives. Further, our operation as a public company will require that we attract additional personnel to support the establishment of appropriate financial reporting and internal controls systems. Competition for personnel is intense. We may not be able to attract, retain and/or successfully integrate qualified scientific, financial and other management personnel, which could materially harm our business.

If we fail to properly manage any growth we may experience, our business could be adversely affected.

We anticipate increasing the scale of our operations as we seek to develop our product candidates, including hiring and training additional personnel and establishing appropriate systems for a company with larger operations. The management of any growth we may experience will depend, among other things, upon our ability to develop and improve our operational, financial and management controls, reporting systems and procedures. If we are unable to manage any growth effectively, our operations and financial condition could be adversely affected.

We have identified material weaknesses in our internal control over financial reporting which could, if not remediated, result in material misstatements in our financial statements.

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Management has identified material weaknesses in our internal control over financial reporting as of December 31, 2013. A material weakness is defined as a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our consolidated financial statements will not be prevented or detected on a timely basis. As a result of these material weaknesses, our management concluded that our internal control over financial reporting was not effective based on criteria set forth by the Committee of Sponsoring Organization of the Treadway Commission in 2013 Internal Control—Integrated Framework. We have developed proposed actions aimed at remediating some of these material weaknesses. If our remedial measures are insufficient to address the material weaknesses, or if additional material weaknesses or significant deficiencies in our internal control are discovered or occur in the future, there may be an increased likelihood that our consolidated financial statements contain material misstatements. If that were to occur, we could be required to restate our financial results, which could lead to substantial additional costs for accounting and legal fees and litigation. In addition, even if we are successful in strengthening our controls and procedures, in the future those controls and procedures may not be adequate to prevent or identify irregularities or errors or to facilitate the fair presentation of our consolidated financial statements. If we fail to achieve and maintain the adequacy of our internal controls in accordance with applicable standards, we may be unable to conclude that we have effective internal controls over financial reporting. If we cannot produce reliable financial reports, our business and financial condition could be harmed, investors could lose confidence in our reported financial information, or the market price of our stock could decline significantly. Moreover, our reputation with lenders, investors, securities analysts and others may be adversely affected.

We may become involved in litigation and administrative proceedings that may materially affect us.

From time to time, we may become involved in various legal proceedings relating to matters incidental to the ordinary course of our business, including commercial, employment, class action, whistleblower and other litigation and claims, and governmental and other regulatory investigations and proceedings. Such matters can be time-consuming, divert management's attention and resources and cause us to incur significant expenses. Furthermore, because litigation is inherently unpredictable, there can be no assurance that the results of any of these actions will not have a material adverse effect on our business, results of operations or financial condition.

We rely significantly on information technology and any failure, inadequacy, interruption or security lapse of that technology, including any cybersecurity incidents, could harm our ability to operate our business effectively.

We maintain sensitive data pertaining to our Company on our computer networks, including information about our research and development activities, our intellectual property and other proprietary business information. Our internal computer systems and those of third parties with which we contract may be vulnerable to damage from cyber attacks, computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures, despite the implementation of security measures. System failures, accidents or security breaches could cause interruptions to our operations, including material disruption of our research and development activities, result in significant data losses or theft of our intellectual property or proprietary business information, and could require substantial expenditures to remedy. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or applications or inappropriate disclosure of confidential or proprietary information, we could incur liability and our research and development programs could be delayed, any of which would harm our business and operations.

Risks Related to the Development and Commercialization of our Product Candidates

Our current business plan is dependent on the success of one product candidate.

Our business is currently focused almost entirely on the development and commercialization of one product candidate, AC5. Our reliance on one primary product candidate means that, if we are not able to obtain regulatory approvals and market acceptance of that product, our chances for success will be significantly reduced. We are also less likely to withstand competitive pressures if any of our competitors develops and obtains regulatory approval or certification for a similar product faster than we can or that is otherwise more attractive to the market than AC5. Our current dependence on one product candidate increases the risk that our business will fail if our development efforts for that product candidate experience delays or other obstacles or are otherwise not successful.

The Chemistry, Manufacturing and Control ("CMC") process may be challenging.

Because of the complexity of our lead product candidate, the CMC process may be difficult to complete successfully within the parameters required by the FDA or its foreign counterparts. Peptide formulation optimization is particularly challenging, and any delays could negatively impact our anticipated clinical trial and subsequent commercialization timeline. Furthermore, we have, and the third parties with which we may establish relationships may also have, limited experience with attempting to commercialize a self-assembling peptide as a medical device, which increases the risks associated with completing the CMC process successfully, on time, or within the projected budget. Failure to complete the CMC process successfully would impact our ability to start a clinical trial and could severely limit the long-term viability of our business.

Our principal product candidate is inherently risky because it is based on novel technologies.

We are subject to the risks of failure inherent in the development of products based on new technologies. The novel nature of AC5 creates significant challenges with respect to product development and optimization, engineering, manufacturing, scale-up, quality systems, pre-clinical *in vitro* and *in vivo* testing, government regulation and approval, third-party reimbursement and market acceptance. Our failure to overcome any one of those challenges could harm our operations, ability to commence and/or complete a clinical trial, and overall chances for success.

Compliance with governmental regulations regarding the treatment of animals used in research could increase our operating costs, which would adversely affect the commercialization of our technology.

The Animal Welfare Act ("AWA") is the federal law that covers the treatment of certain animals used in research. Currently, the AWA imposes a wide variety of specific regulations that govern the humane handling, care, treatment and transportation of certain animals by producers and users of research animals, most notably relating to personnel, facilities, sanitation, cage size, and feeding, watering and shipping conditions. Third parties with whom we contract are subject to registration, inspections and reporting requirements under the AWA. Furthermore, some states have their own regulations, including general anti-cruelty legislation, which establish certain standards in handling animals. Comparable rules, regulations, and or obligations exist in many foreign jurisdictions. If we or our contractors fail to comply with regulations concerning the treatment of animals used in research, we may be subject to fines and penalties and adverse publicity, and our operations could be adversely affected.

If the FDA or similar foreign agencies or intermediaries impose requirements or an alternative product classification more onerous than we anticipate, our business could be adversely affected.

The development plan for our lead product candidate is based on our anticipation of pursuing the medical device regulatory pathway. However, the FDA and other applicable foreign agencies will have authority to finally determine the regulatory route for our product candidates in their jurisdictions. If the FDA or similar foreign agencies or intermediaries deem our product to be a member of a category other than a medical device, such as a drug or biologic, or impose additional requirements on our pre-clinical and clinical development than we presently anticipate, financing needs would increase, the timeline for product approval would lengthen, the program complexity and resource requirements world increase, and the probability of successfully commercializing a product would decrease. Any or all of those circumstances would materially adversely affect our business.

If we are not able to secure and maintain relationships with third parties that are capable of conducting clinical trials on our product candidates, our product development efforts could be adversely impacted.

Our management has limited experience in conducting preclinical development activities and clinical trials. As a result, we have relied and will need to continue to rely on research institutions and other third party clinical investigators to conduct our preclinical and clinical trials. If we are unable to reach agreement with qualified research institutions and clinical investigators on acceptable terms, or if any resulting agreement is terminated prior to the completion of our clinical trials, then our product development efforts could be materially delayed or otherwise harmed. Further, our reliance on third parties to conduct our clinical trials will provide us with less control over the timing and cost of those trials and the ability to recruit suitable subjects to participate in the trials. Moreover, the FDA and other regulatory authorities require that we comply with standards, commonly referred to as good clinical practices ("GCP"), for conducting, recording and reporting the results of our preclinical development activities and our clinical trials, to assure that data and reported results are credible and accurate and that the rights, safety and confidentiality of trial participants are protected. Additionally, we and any third party contractor performing preclinical and clinical studies are subject to regulations governing the treatment of human and animal subjects in performing those studies. Our reliance on third parties that we do not control does not relieve us of those responsibilities and requirements. If those third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our preclinical development activities or clinical trials in accordance with regulatory requirements or stated protocols, we may not be able to obtain, or may be delayed in obtaining, regulatory approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates. Any of those circumstances would materially harm our business and prospects.

Any clinical trials that are planned or are conducted on our product candidates may not start or may fail.

Clinical trials are lengthy, complex and extremely expensive processes with uncertain expenditures and results and frequent failures. Any clinical trials that are planned or which commence for any of our product candidates could be delayed, limited or fail for a number of reasons, including if:

- the FDA or other regulatory authorities do not grant permission to proceed or place a trial on clinical hold due to safety concerns or other reasons;
- sufficient suitable subjects do not enroll or remain in our trials;
- we fail to produce necessary amounts of product candidate;
- subjects experience an unacceptable rate of efficacy of the product candidate;
- subjects experience an unacceptable rate or severity of adverse side effects, demonstrating a lack of safety of the product candidate;
- any portion of the trial or related studies produces negative or inconclusive results or other adverse events;
- reports from preclinical or clinical testing on similar technologies and products raise safety and/or efficacy concerns;
- third-party clinical investigators lose their licenses or permits necessary to perform our clinical trials, do not perform their clinical trials on their anticipated schedule or consistent with the clinical trial protocol, GCP or regulatory requirements, or other third parties do not perform data collection and analysis in a timely or accurate manner;
- inspections of clinical trial sites by the FDA or an institutional review board ("IRB") or other applicable regulatory authorities find violations that require us to undertake corrective action, suspend or terminate one or more testing sites, or prohibit us from using some or all of the resulting data in support of our marketing applications with the FDA or other applicable agencies;
- manufacturing facilities of our third party manufacturers are ordered by the FDA or other government or regulatory authorities to temporarily or permanently shut down due to violations of current good manufacturing practices ("cGMP") or other applicable requirements;
- third-party contractors become debarred or suspended or otherwise penalized by FDA or other government or regulatory authorities for violations of regulatory requirements;
- the FDA or other regulatory authorities impose requirements on the design, structure or other features of the clinical trials for our product candidates that we and/or our third party contractors are unable to satisfy;
- one or more IRBs refuses to approve, suspends or terminates a trial at an investigational site, precludes enrollment of additional subjects, or withdraws its approval of the trial;
- the FDA or other regulatory authorities seek the advice of an advisory committee of physician and patient representatives that may view the risks of our product candidates as outweighing the benefits;
- the FDA or other regulatory authorities require us to expand the size and scope of the clinical trials, which we may not be able to do; or
- the FDA or other regulatory authorities impose prohibitive post-marketing restrictions on any of our product candidates that attains regulatory approval.

Any delay or failure of one or more of our clinical trials may occur at any stage of testing. Any such delay could cause our development costs to materially increase, and any such failure could significantly impair our business plans, which would materially harm our financial condition and operations.

We cannot market and sell any product candidate in the U.S. or in any other country or region if we fail to obtain the necessary regulatory approvals or certifications from applicable government agencies.

We cannot sell our product candidates in any country until regulatory agencies grant marketing approval or other required certifications. The process of obtaining such approval is lengthy, expensive and uncertain. If we are able to obtain such approvals for our lead product candidate or any other product candidate we may pursue, which we may never be able to do, it would likely be a process that takes many years to achieve.

To obtain marketing approvals in the U.S. for our product candidates, we must, among other requirements, complete carefully controlled and well-designed clinical trials sufficient to demonstrate to the FDA that the product candidate is safe and effective for each indication for which we seek approval. As described above, many factors could cause those trials to be delayed or to fail.

We believe that the pathway to marketing approval in the U.S. for our lead product candidate will likely require the process of FDA Premarket Approval ("PMA") for the product, which is based on novel technologies and likely will be classified as a Class III medical device. This approval pathway can be lengthy and expensive, and is estimated to take from one to three years or longer from the time the PMA application is submitted to the FDA until approval is obtained, if approval can be obtained at all.

Similarly, to obtain approval to market our product candidates outside of the U.S., we will need to submit clinical data concerning our product candidates to and receive marketing approval or other required certifications from governmental or other agencies in those countries, which in certain countries includes approval of the price we intend to charge for a product. For instance, in order to obtain the certification needed to market our lead product candidate in the EU, we believe that we will need to obtain a CE mark for the product, which entails scrutiny by applicable regulatory agencies and bears some similarity to the PMA process, including completion of one or more successful clinical trials.

We may encounter delays or rejections if changes occur in regulatory agency policies, if difficulties arise within regulatory or related agencies such as, for instance, any delays in their review time, or if reports from preclinical and clinical testing on similar technology or products raise safety and/or efficacy concerns during the period in which we develop a product candidate or during the period required for review of any application for marketing approval or certification.

Any difficulties we encounter during the approval or certification process for any of our product candidates would have a substantial adverse impact on our operations and financial condition and could cause our business to fail.

Any product for which we obtain required regulatory approvals could be subject to post-approval regulation, and we may be subject to penalties if we fail to comply with such post-approval requirements.

Any product for which we are able to obtain marketing approval or other required certifications, and for which we are able to obtain approval of the manufacturing processes, post-approval clinical data, labeling, advertising and promotional activities for such product, will be subject to continual requirements of and review by the FDA and comparable foreign regulatory authorities, including through periodic inspections. These requirements include, without limitation, submissions of safety and other post-marketing information and reports, registration requirements, cGMP requirements relating to quality control, quality assurance and corresponding maintenance of records and documents. Maintaining compliance with any such regulations that may be applicable to us or our product candidates in the future would require significant time, attention and expense. Even if marketing approval of a product is granted, the approval may be subject to limitations on the indicated uses for which the product may be marketed or other conditions of approval, or may contain requirements for costly and time consuming post-marketing approval testing and surveillance to monitor the safety or efficacy of the product. Discovery after approval of previously unknown problems with any approved product candidate or related manufacturing processes, or failure to comply with regulatory requirements, may result in consequences to us such as:

- restrictions on the marketing or distribution of a product, including refusals to permit the import or export of the product;
- warning letters from governmental agencies;
- the requirement to include warning labels on the products;

- withdrawal or recall of the products from the market;
- refusal by the FDA or other regulatory agencies to approve pending applications or supplements to approved applications that we may submit;
- suspension of any ongoing clinical trials;
- fines, restitution or disgorgement of profits or revenue;
- suspension or withdrawal of marketing approvals or certifications; or
- civil or criminal penalties.

If any of our product candidates achieves required regulatory marketing approvals or certifications in the future, the subsequent occurrence of any such post-approval consequences would materially adversely affect our business and operations.

Current or future legislation may make it more difficult and costly for us to obtain marketing approval or other certifications of our product candidates.

In 2007, the Food and Drug Administration Amendments Act of 2007 (the "FDAAA") was adopted. This legislation grants significant powers to the FDA, many of which are aimed at assuring the safety of medical products after approval. For example, the FDAAA grants the FDA authority to impose post-approval clinical study requirements, require safety-related changes to product labeling and require the adoption of complex risk management plans. Pursuant to the FDAAA, the FDA may require that a new product be used only by physicians with specialized training, only in specified health care settings, or only in conjunction with special patient testing and monitoring. The legislation also includes requirements for disclosing clinical study results to the public through a clinical study registry, and renewed requirements for conducting clinical studies to generate information on the use of products in pediatric patients. Under the FDAAA, companies that violate these laws are subject to substantial civil monetary penalties. The requirements and changes imposed by the FDAAA, or any other new legislation, regulations or policies that grant the FDA or other regulatory agencies additional authority that further complicates the process for obtaining marketing approval and/or further restricts or regulates post-marketing approval activities, could make it more difficult and more costly for us to obtain and maintain approval of any of our product candidates.

Public perception of ethical and social issues may limit or discourage the type of research we conduct.

Our clinical trials will involve human subjects, and we and third parties with whom we contract also conduct research involving animal subjects. Governmental authorities could, for public health or other purposes, limit the use of human or animal research or prohibit the practice of our technology. Further, ethical and other concerns about our or our third party contractors' methods, particularly the use of human subjects in clinical trials or the use of animal testing, could delay our research and preclinical and clinical trials, which would adversely affect our business and financial condition.

Use of third parties to manufacture our product candidates may increase the risk that preclinical development, clinical development and potential commercialization of our product candidates could be delayed, prevented or impaired.

We have limited personnel with experience in medical device development and manufacturing, do not own or operate manufacturing facilities, and generally lack the resources and the capabilities to manufacture any of our product candidates on a clinical or commercial scale. We currently intend to outsource all or most of the clinical and, commercial manufacturing and packaging of our product candidates to third parties. However, we have not established long-term agreements with any third party manufacturers for the supply of any of our product candidates. There are a limited number of manufacturers that operate under cGMP regulations and that are capable of and willing to manufacture our lead product candidate utilizing the manufacturing methods that are required to produce that product candidate, and our product candidates will compete with other product candidates for access to qualified manufacturing facilities. If we have difficulty locating third party manufacturers to develop our product candidates for preclinical and clinical work, then our product development programs will experience delays and otherwise suffer. We may also be unable to enter into agreements for the commercial supply of products with third party manufacturers in the future, or may be unable to do so when needed or on acceptable terms. Any such events could materially harm our business.

Reliance on third party manufacturers entails risks to our business, including without limitation:

- the failure of the third party to maintain regulatory compliance, quality assurance, and general expertise in advanced manufacturing techniques and processes that may be necessary for the manufacture of our product candidates;
- limitations on supply availability resulting from capacity and scheduling constraints of the third parties;
- failure of the third party manufacturers to meet the demand for the product candidate, either from future customers or for preclinical or clinical trial needs;
- the possible breach of the manufacturing agreement by the third party; and
- the possible termination or non-renewal of the agreement by the third party at a time that is costly or inconvenient for us.

The failure of any of our contract manufacturers to maintain high manufacturing standards could result in harm to clinical trial participants or patients using the products. Such failure could also result in product liability claims, product recalls, product seizures or withdrawals, delays or failures in testing or delivery, cost overruns or other problems that could seriously harm our business or profitability. Further, our contract manufacturers will be required to adhere to FDA and other applicable regulations relating to manufacturing practices. Those regulations cover all aspects of the manufacturing, testing, quality control and recordkeeping relating to our product candidates and any products that we may commercialize in the future. The failure of our third party manufacturers to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approval or other required certifications of our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect our business, financial condition and operations.

Materials necessary to manufacture our product candidates may not be available on commercially reasonable terms, or at all, which may delay or otherwise hinder the development and commercialization of those product candidates.

We will rely on the manufacturers of our product candidates to purchase from third party suppliers the materials necessary to produce the compounds for preclinical and clinical studies, and may continue to rely on those suppliers for commercial distribution if we obtain marketing approval or other required certifications for any of our product candidates. The materials to produce our products may not be available when needed or on commercially reasonable terms, and the prices for such materials may be susceptible to fluctuations. We do not have any control over the process or timing of the acquisition of these materials by our manufacturers. Moreover, we currently do not have any agreements relating to the commercial production of any of these materials. If these materials cannot be obtained for our preclinical and clinical studies, product testing and potential regulatory approval of our product candidates would be delayed, which would significantly impact our ability to develop our product candidates and materially adversely affect our ability to meet our objectives and obtain operations success.

We may not be successful in maintaining or establishing collaborations, which could adversely affect our ability to develop and, if required regulatory approvals are obtained, commercialize, our product candidates.

We intend to collaborate with physicians, patient advocacy groups, foundations, government agencies, and/or other third parties to assist with the development of our product candidates. If required regulatory approvals are obtained for any of our product candidates, then we may consider entering into selective collaboration arrangements with medical technology, pharmaceutical or biotechnology companies and/or seek to establish strategic relationships with marketing partners for the development, sale, marketing and/or distribution of our products within or outside of the U.S. If we elect to seek collaborators in the future but are unable to reach agreements with suitable collaborators, then we may fail to meet our business objectives for the affected product or program. Moreover, collaboration arrangements are complex and time consuming to negotiate, document and implement, and we may not be successful in our efforts, if any, to establish and implement collaborations or other alternative arrangements. The terms of any collaborations or other arrangements that we establish may not be favorable to us, and the success of any such collaborations will depend heavily on the efforts and activities of our collaborators. Any failure to engage successful collaborators could cause delays in our product development and/or commercialization efforts, which could harm our financial condition and operational results.

We compete with other pharmaceutical and medical device companies, including companies that may develop products that make our product candidates less attractive or obsolete.

The medical device, pharmaceutical and biotechnology industries are highly competitive. If our product candidates become available for commercial sale, we will compete in that competitive marketplace. There are several products on the market or in development that could be competitors with our lead product candidate. While our management, which is familiar with these other products, believes that our lead product candidate could be safer and possibly more effective than those competitors, those beliefs may be wrong. Further, most of our competitors have greater resources or capabilities and greater experience in the development, approval and commercialization of medical devices or other products than we do. We may not be able to compete successfully against them. We also compete for funding with other companies in our industry that are focused on discovering and developing novel improvements in surgical bleeding prevention.

We anticipate that competition in our industry will increase. In addition, the healthcare industry is characterized by rapid technological change, resulting in new product introductions and other technological advancements. Our competitors may develop and market products that render our lead product candidate or any future product candidate we may seek to develop non-competitive or otherwise obsolete. Any such circumstances could cause our operations to suffer.

If we fail to generate market acceptance of our product candidates and establish programs to educate and train surgeons as to the distinctive characteristics of our product candidates, we will not be able to generate revenues on

our product candidates.

Acceptance in the marketplace of our lead product candidate depends in part on our and our third party contractors' ability to establish programs for the training of surgeons in the proper usage of that product candidate, which will require significant expenditure of resources. Convincing surgeons to dedicate the time and energy necessary to properly train to use new products and techniques is challenging, and we may not be successful in those efforts. If surgeons are not properly trained, they may ineffectively use our product candidates. Such misuse could result in unsatisfactory patient outcomes, patient injury, negative publicity or lawsuits against us. Accordingly, even if our product candidates are superior to alternative treatments, our success will depend on our ability to gain and maintain market acceptance for those product candidates among certain select groups of the population and develop programs to effectively train them to use those products. If we fail to do so, we will not be able to generate revenue from product sales and our business, financial condition and results of operations will be adversely affected.

We face uncertainty related to pricing, reimbursement and healthcare reform, which could reduce our potential revenues.

If our product candidates are approved for commercialization, any sales will depend in part on the availability of coverage and reimbursement from third-party payors such as government insurance programs, including Medicare and Medicaid, private health insurers, health maintenance organizations and other healthcare related organizations. If our product candidates obtain marketing approval, pricing and reimbursement may be uncertain. Both the federal and state governments in the U.S. and foreign governments continue to propose and pass new legislation affecting coverage and reimbursement policies, which are designed to contain or reduce the cost of healthcare. Further, federal, state and foreign healthcare proposals and reforms could limit the prices that can be charged for the product candidates that we may develop, which may limit our commercial opportunity. Adoption of our product candidates by the medical community may be limited if doctors and hospitals do not receive adequate partial or full reimbursement for use of our products, if any are commercialized. In some foreign jurisdictions, marketing approval or allowance could be dependent upon pre-marketing price negotiations. As a result, any denial of private or government payor coverage or inadequate reimbursement for procedures performed using our products, before or upon commercialization, could harm our business and reduce our prospects for generating revenue.

In addition, the U.S. Congress recently adopted legislation regarding health insurance. As a result of this new legislation, substantial changes could be made to the current system for paying for healthcare in the U.S., including modifications to the existing system of private payors and government programs, such as Medicare, Medicaid and State Children's Health Insurance Program, creation of a government-sponsored healthcare insurance source, or some combination of those, as well as other changes. Restructuring the coverage of medical care in the U.S. could impact reimbursement for medical devices such as our product candidates. If reimbursement for our approved product candidates, if any, is substantially less than we expect, or rebate obligations associated with them are substantially increased, our business could be materially and adversely impacted.

The use of our product candidates in human subjects may expose us to product liability claims, and we may not be able to obtain adequate insurance or otherwise defend against any such claims.

We face an inherent risk of product liability claims and do not currently have product liability insurance coverage. We will need to obtain insurance coverage if and when we begin clinical trials and commercialization of any of our product candidates. We may not be able to obtain or maintain product liability insurance on acceptable terms with adequate coverage. If claims against us exceed any applicable insurance coverage we may obtain, then our business could be adversely impacted. Regardless of whether we would be ultimately successful in any product liability litigation, such litigation could consume substantial amounts of our financial and managerial resources, which could significantly harm our business.

Risks Related to our Intellectual Property

If we are unable to obtain and maintain protection for our intellectual property rights, the value of our technology and products will be adversely affected.

Our success will depend in large part on our ability to obtain and maintain protection in the U.S. and other countries for the intellectual property rights covering or incorporated into our technology and products. The ability to obtain patents covering technology in the field of medical devices generally is highly uncertain and involves complex legal, technical, scientific and factual questions. We may not be able to obtain and maintain patent protection relating to our technology or products. Even if issued, patents issued or licensed to us may be challenged, narrowed, invalidated, held to be unenforceable or circumvented, or determined not to cover our product candidates or our competitors' products, which could limit our ability to stop competitors from marketing identical or similar products. Further, we cannot be certain that we were the first to make the inventions claimed in the patents we own or license, or that protection of the inventions set forth in those patents was the first to be filed in the U.S. Third parties that have filed patents or patent applications covering similar technologies or processes may challenge our claim of sole right to use the intellectual property covered by the patents we own or exclusively license. Moreover, changes in applicable intellectual property laws or interpretations thereof in the U.S. and other countries may diminish the value of our intellectual property rights or narrow the scope of our patent protection. Any failure to obtain or maintain adequate protection for the intellectual property rights we use would materially harm our business, product development programs and prospects.

In addition, our proprietary information, trade secrets and know-how are important components of our intellectual property rights. We seek to protect our proprietary information, trade secrets, know-how and confidential information, in part, with confidentiality agreements with our employees, corporate partners, outside scientific collaborators, sponsored researchers, consultants and other advisors. We also have invention or patent assignment agreements with our employees and certain consultants and advisors. If our employees or consultants breach those agreements, we may not have adequate remedies for any of those breaches. In addition, our proprietary information, trade secrets and know-how may otherwise become known to or be independently developed by others. Enforcing a claim that a party illegally obtained and is using our proprietary information, trade secrets and know-how is difficult, expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the U.S. may be less willing to protect trade secrets. Costly and time consuming litigation could be necessary to seek to enforce and determine the scope of our intellectual property rights, and failure to obtain or maintain protection thereof could adversely affect our competitive business position and results of operations.

If we lose certain intellectual property rights owned by third parties and licensed to us, our business could be materially harmed.

We have entered into certain in-license agreements with MIT and with certain other third parties, and may seek to enter into additional in-license agreements relating to other intellectual property rights in the future. To the extent we and our product candidates rely heavily on any such in-licensed intellectual property, we are subject to our and the counterparty's compliance with the terms of such agreements in order to maintain those rights. Presently, we, our lead product candidate and our business plans are dependent on the patent and other intellectual property rights that are licensed to us under our license agreement with MIT. Although that agreement has a durational term through the life of the licensed patents, it also imposes certain diligence, capital raising, and other obligations on us, our breach of which could permit MIT to terminate the agreement. Further, we are responsible for all patent prosecution and maintenance fees under that agreement, and a failure to pay such fees on a timely basis could also entitle MIT to terminate the agreement. Any failure by us to satisfy our obligations under our license agreement with MIT or any other dispute or other issue relating to that agreement could cause us to lose some or all of our rights to use certain intellectual property that is material to our business and our lead product candidate, which would materially harm our product development efforts and could cause our business to fail.

If we infringe or are alleged to infringe the intellectual property rights of third parties, our business and financial condition could suffer.

Our research, development and commercialization activities, as well as any product candidates or products resulting from those activities, may infringe or be accused of infringing a patent or other intellectual property under which we do not hold a license or other rights. Third parties may own or control those patents or other rights in the U.S. or abroad. The third parties that own or control those intellectual property rights could bring claims against us that would cause us to incur substantial time, expense, and diversion of management attention. If a patent or other intellectual property infringement suit were brought against us, we could be forced to stop or delay research, development, manufacturing or sales, if any, of the applicable product or product candidate that is the subject of the suit. In order to avoid or settle potential claims with respect to any of the patent or other intellectual property rights of third parties, we may choose or be required to seek a license from a third party and be required to pay license fees or royalties or both. Any such license may not be available on acceptable terms, or at all. Even if we or our future collaborators were able to obtain a license, the rights granted to us or them could be non-exclusive, which could result in our competitors gaining access to the same intellectual property rights and materially negatively affecting the commercialization potential of our planned products. Ultimately, we could be prevented from commercializing one or more product candidates, or be forced to cease some aspects of our business operations, if, as a result of actual or threatened infringement claims, we are unable to enter into licenses on acceptable terms or at all or otherwise settle such claims. Further, if any such claims were successful against us, we could be forced to pay substantial damages. Any of those results could significantly harm our business, prospects and operations.

Risks Related to the Merger and Ownership of our Common Stock

There is not now, and there may not ever be, an active market for our common stock, which trades in the over-the-counter market in low volumes and at volatile prices.

There currently is a limited market for our common stock. Although our common stock is quoted on the OTCQB, an over-the-counter quotation system, trading of our common stock is extremely limited and sporadic and generally at very low volumes. Further, the price at which our common stock may trade is volatile and we expect that it will continue to fluctuate significantly in response to various factors, many of which are beyond our control. The stock market in general, and securities of small-cap companies driven by novel technologies in particular, has experienced extreme price and volume fluctuations in recent years. Continued market fluctuations could result in further volatility in the price at which our common stock may trade, which could cause its value to decline. To the extent we seek to raise capital in the future through the issuance of equity, those efforts could be limited or hindered by low and/or volatile market prices for our common stock.

We do not now, and are not expected to in the foreseeable future, meet the initial listing standards of the Nasdaq Stock Market or any other national securities exchange. We presently anticipate that our common stock will continue to be quoted on the OTCQB or another over-the-counter quotation system. In those venues, our stockholders may find it difficult to obtain accurate quotations as to the market value of their shares of our common stock, and may find few buyers to purchase their stock and few market makers to support its price.

A more active market for our common stock may never develop. As a result, investors must bear the economic risk of holding their shares of our common stock for an indefinite period of time.

Our common stock is a "penny stock."

The SEC has adopted regulations that generally define "penny stock" as an equity security that has a market price of less than $5.00 per share, subject to specific exemptions. The market price of our common stock is, and is expected to continue to be in the near term, less than $5.00 per share and is therefore a "penny stock." Brokers and dealers effecting transactions in "penny stock" must disclose certain information concerning the transaction, obtain a written agreement from the purchaser and determine that the purchaser is reasonably suitable to purchase the securities. Those rules may restrict the ability of brokers or dealers to sell our common stock and may affect the ability of our stockholders to sell their shares of our common stock. In addition, if our common stock continues to be quoted on the OTCQB as we expect, then our stockholders may find it difficult to obtain accurate quotations for our stock, and may find few buyers to purchase our stock and few market makers to support its price.

If we issue additional shares in the future, our existing shareholders will be diluted.

Our articles of incorporation authorize the issuance of up to 300,000,000 shares of common stock. Upon the closing of the Private Placement Financing, we issued an aggregate of 11,400,000 shares of our common stock, which equals approximately 16% of our currently issued and outstanding common stock. Upon the closing of the Private Placement Financing, we also issued Warrants to acquire up to an additional 34,200,000 shares of our common stock, which, assuming no adjustments to and the full exercise of the Warrants and no other issuances of our common stock, would equal approximately 32% of our then-issued and outstanding common stock. In addition to capital raising activities, other possible business and financial uses for our authorized common stock include, without limitation, future stock splits, acquiring other companies, businesses or products in exchange for shares of common stock, issuing shares of our common stock to partners in connection with strategic alliances, attracting and retaining employees by the issuance of additional securities under our various equity compensation plans, or other transactions and corporate purposes that our Board of Directors deems are in the Company's best interest. Additionally, shares of common stock could be used for anti-takeover purposes or to delay or prevent changes in control or management of the Company. We cannot provide assurances that any issuances of common stock will be consummated on favorable terms or at all, that they will enhance stockholder value, or that they will not adversely affect our business or the trading price of our common stock. The issuance of any such shares will reduce the book value per share and may contribute to a reduction in the market price of the outstanding shares of our common stock. If we issue any such additional shares, such issuance will reduce the proportionate ownership and voting power of all current shareholders. Further, such issuance may result in a change of control of our corporation.

Certain terms of the Warrants could result in additional dilution to our existing stockholders.

The number of shares of our common stock into which each of the Warrants issued in connection with the Private Placement Financing is exercisable and the exercise price therefor are subject to adjustment as set forth in the Warrants, including, without limitation, adjustment to the exercise price of the Warrants in the event of certain subsequent issuances and sales of shares of our common stock (or securities convertible or exercisable into shares of our common stock) at a price per share lower than the then-effective exercise price of the Warrants, in which case the exercise price of the Warrants shall be adjusted to equal such lower price per share, as well as customary adjustments in the event of stock dividends and splits, subsequent rights offerings and pro rata distributions to our common stockholders. In the event any such adjustment is triggered, the Warrants could become exercisable for a greater number of shares of our common stock and thereby dilute the ownership of our other stockholders if those Warrants are exercised. Depending on the terms of any subsequent issuance of securities or other circumstance that might trigger such an adjustment and the number of Warrants that are exercised, the amount of any such dilution could be significant.

Future sales of our common stock or rights to purchase common stock, or the perception that such sales could occur, could cause our stock price to fall.

After giving effect to the funds raised in the Private Placement Financing, we expect that significant additional capital will be needed in the near-term to continue our planned operations. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. Any such sales of our common stock by us or resales of our common stock by our existing stockholders could cause the market price of our common stock to decline.

Upon the effectiveness of the registration statement of which this prospectus forms a part, approximately 16% of our currently issued and outstanding common stock will become registered and freely tradable, and, assuming no adjustments to and the full exercise of the Warrants and no other issuances of our common stock, up to 32% of our then-issued and outstanding common stock would become registered and freely tradable. The sales of such shares in the market, or the perception that such sales could occur following the effectiveness of the registration statement of which this prospectus forms a part, could cause our stock price to fall. Additionally, pursuant to the 2013 Plan, we are authorized to grant equity awards to our employees, directors and consultants for up to an aggregate of 10,231,197 shares of our common stock, and there are additional currently outstanding warrants to acquire up to 4,145,985 shares of our common stock. Any future grants of options, warrants or other securities exercisable or convertible into our common stock, or the exercise or conversion of such shares, and any sales of such shares in the market, could have an adverse effect on the market price of our common stock.

FINRA sales practice requirements may limit a stockholder's ability to buy and sell our stock.

In addition to the "penny stock" rules described above, FINRA has adopted rules that require that, in recommending an investment to a customer, a broker-dealer must have reasonable grounds for believing that the investment is suitable for that customer. Prior to recommending speculative low priced securities to their non-institutional customers, broker-dealers must make reasonable efforts to obtain information about the customer's financial status, tax status, investment objectives and other information. Under interpretations of these rules, FINRA has indicated its belief that there is a high probability that speculative low priced securities will not be suitable for at least some customers. These FINRA requirements make it more difficult for broker-dealers to recommend that at least some of their customers buy our common stock, which may limit the ability of our stockholders to buy and sell our common stock and could have an adverse effect on the market for our shares.

There may be additional risks because we recently completed a reverse merger transaction.

Additional risks may exist because we recently completed a "reverse merger" transaction. Securities analysts of major brokerage firms may not provide coverage of the Company following the Merger because there may be little incentive to brokerage firms to recommend the purchase of our common stock. There may also be increased scrutiny by the SEC and other government agencies and holders of our securities due to the nature of the transaction, as there has been increased focus on transactions such as the Merger in recent years. Further, since the Company existed as a "shell company" under applicable rules of the SEC up until the closing of the Merger on June 26, 2013, there will be certain restrictions and limitations on the Company going forward relating to any potential future issuances of additional securities to raise funding and compliance with applicable SEC rules and regulations.

The Company may have material liabilities that were not discovered before the closing of the Merger.

The Company may have material liabilities that were not discovered before the consummation of the Merger. We could experience losses as a result of any such unasserted liabilities are eventually found to be incurred, which could materially harm our business and financial condition. Although the Merger Agreement contained customary representations and warranties from the Company concerning its assets, liabilities, financial condition and affairs, there may be limited or no recourse against the Company's prior owners or principals in the event those prove to be untrue. As a result, the stockholders of the Company bear risks relating to any such unknown or unasserted liabilities.

Certain of our directors and officers own a significant percentage of our capital stock as a result of the Merger and are able to exercise significant influence over the Company.

Certain of our directors and executive officers own a significant percentage of our outstanding capital stock. Dr. Terrence W. Norchi, our President, Chief Executive Officer and a director, and Dr. Avtar Dhillon, the Chairman of our Board of Directors, collectively hold or control approximately 25% of our outstanding shares of common stock. Accordingly, these members of our Board of Directors and management team have substantial voting power to approve matters requiring stockholder approval, including without limitation the election of directors, and have significant influence over our affairs. This concentration of ownership could have the effect of delaying or preventing a change in control of our Company, even if such a change in control would be beneficial to our stockholders.

The elimination of monetary liability against our directors and officers under Nevada law and the existence of indemnification rights held by our directors, officers and employees may result in substantial expenditures by us and may discourage lawsuits against our directors, officers and employees.

Our articles of incorporation eliminate the personal liability of our directors and officers to our Company and our stockholders for damages for breach of fiduciary duty as a director or officer to the extent permissible under Nevada law. Further, our amended and restated bylaws provide that we are obligated to indemnify any of our directors or officers to the fullest extent authorized by Nevada law and, subject to certain conditions, advance the expenses incurred by any director or officer in defending any action, suit or proceeding prior to its final disposition. Those indemnification obligations could result in our Company incurring substantial expenditures to cover the cost of settlement or damage awards against our directors or officers, which we may be unable to recoup. These provisions and resultant costs may also discourage us from bringing a lawsuit against any of our current or former directors or officers for breaches of their fiduciary duties, and may similarly discourage the filing of derivative litigation by our stockholders against our directors and officers even if such actions, if successful, might otherwise benefit us or our stockholders.

We are subject to the reporting requirements of federal securities laws, compliance with which involves significant time, expense and expertise.

We are a public reporting company in the U.S., and, accordingly, are subject to the information and reporting requirements of the Exchange Act and other federal securities laws, including the obligations imposed by the Sarbanes-Oxley Act. The costs associated with preparing and filing annual, quarterly and current reports, proxy statements and other information with the SEC in the ordinary course, as well as preparing and filing audited financial statements, have caused, and could continue to cause, our operational expenses to remain at higher levels or continue to increase.

Our present management team has only limited experience managing public companies. It will be time consuming, difficult and costly for our management team to acquire additional expertise and experience in operating a public company, and to develop and implement the internal controls and reporting procedures required by Sarbanes-Oxley and other applicable securities laws. We will need to hire additional financial reporting, internal controls, accounting and other finance staff in order to develop and implement appropriate internal controls and reporting procedures as required by applicable securities regulations for public companies, which we may not be able to do on a timely basis or at all.

Shares of our common stock that have not been registered under federal securities laws are subject to resale restrictions imposed by Rule 144, including those set forth in Rule 144(i) which apply to a former "shell company." In addition, any shares of our common stock that are held by affiliates, including any that are registered, will be subject to the resale restrictions of Rule 144.

Pursuant to Rule 144 under the Securities Act, a “shell company” is defined as a company that has no or nominal operations and either no or nominal assets; assets consisting solely of cash and cash equivalents; or assets consisting of any amount of cash and cash equivalents and nominal other assets. We were a shell company prior to the closing of the Merger, and as such, sales of our securities pursuant to Rule 144 are not permitted until at least 12 months have elapsed since June 26, 2013, the date on which our Current Report on Form 8-K, reflecting our status as a non-shell company, was filed with the SEC. Therefore, any outstanding restricted securities or any restricted securities we may sell in the future or issue to consultants or employees in consideration for services rendered or for any other purpose will have limited liquidity unless and until such securities are registered under the Securities Act and/or until at least June 26, 2014. Rule 144 also imposes other requirements on us and our stockholders that must be met in order to effect a sale thereunder. As a result, it will be more difficult for us to raise funding to support our operations through the sale of debt or equity securities unless we agree to register such securities under the Securities Act, which could cause us to expend significant additional time and cash resources and which we presently have no intention to pursue. Further, it may be more difficult for us to compensate our employees and consultants with our securities instead of cash. Our previous status as a shell company could also limit our use of our securities to pay for any acquisitions we may seek to pursue in the future (although none are currently planned), and could cause the value of our securities to decline. In addition, any shares held by affiliates, including shares received in any registered offering, will be subject to certain additional requirements in order to effect a sale of such shares under Rule 144.

We do not intend to pay cash dividends on our capital stock in the foreseeable future.

We have never declared or paid any dividends on our shares and do not anticipate paying any such dividends in the foreseeable future. Any future payment of cash dividends would depend on our financial condition, contractual restrictions, solvency tests imposed by applicable corporate laws, results of operations, anticipated cash requirements and other factors and will be at the discretion of our Board of Directors. Our stockholders should not expect that we will ever pay cash or other dividends on our outstanding capital stock.

We are at risk of securities class action litigation that could result in substantial costs and divert management's attention and resources.

In the past, securities class action litigation has been brought against companies following periods of volatility of its securities in the marketplace, particularly following a company's initial public offering. Due to the volatility of our stock price, we could be the target of securities litigation in the future. Securities litigation could result in substantial costs and divert management's attention and resources.

Forward-Looking Statements

This prospectus contains forward-looking statements that involve risks, uncertainties and assumptions. In some cases, you can identify forward-looking statements by terminology such as "if," "will," "may," "might," "will likely result," "should," "expect," "plan," "anticipate," "believe," "estimate," "project," "intend," "goal," "objective," "predict," "potential" or "continu negative of these terms or other comparable terminology. All statements made in this prospectus other than statements of historical fact are statements that could be deemed forward-looking statements, including without limitation statements about our business plan, our plan of operations and our need to obtain future financing. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks in the section entitled "Risk Factors" and the risks set out below, any of which may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. These risks include, by way of example and not in limitation, risks related to:

- Our ability to continue as a going concern;
- Our ability to obtain financing necessary to operate our business;
- Our limited operating history;
- The results of our research and development activities, including uncertainties relating to the preclinical and clinical testing of our product candidates;
- The early stage of our primary product candidate presently under development;
- Our ability to develop, obtain required approvals for and commercialize our product candidates;
- Our ability to recruit and retain qualified personnel;
- Our ability to manage any future growth we may experience;
- Our ability to maintain and protect our intellectual property;
- Our dependence on third party manufacturers, suppliers, research organizations, testing laboratories and other potential collaborators;

- The size and growth of the potential markets for any of our approved product candidates, and the rate and degree of market acceptance of any of our approved product candidates;

- Our ability to successfully complete potential acquisitions and collaborative arrangements;

- Competition in our industry;

- General economic and business conditions; and

- Other factors discussed under the section entitled “Risk Factors”.

New risks emerge in our rapidly-changing industry from time to time. As a result, it is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business. If any such risks or uncertainties materialize or such assumptions prove incorrect, our results could differ materially from those expressed or implied by such forward-looking statements and assumptions. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity or performance. These forward-looking statements speak only as of the date of this prospectus. Except as required by applicable law, we do not intend to update any of these forward-looking statements.

Selling SECURITYholders

This prospectus covers the resale from time to time by the selling securityholders identified in the table below of up to an aggregate of 60,648,000 shares of our common stock, 11,400,000 of which were previously issued to the selling securityholders and 49,248,000 of which may be issuable upon exercise of the Series A warrants, Series B warrants and Series C warrants. The shares of common stock being offered by the selling securityholders were issued or are issuable upon exercise of the Warrants issued to the selling securityholders in the Private Placement Financing. For additional information regarding the issuance of the shares of common stock and the Warrants, see the description under “Summary—Private Placement Financing” in this prospectus.

We are registering the shares of common stock pursuant to the terms of the registration rights agreement among us and the holders of the common stock and Warrants issued in the Private Placement Financing, in order to permit the selling securityholders identified in the table below to offer the shares for resale from time to time. In accordance with the terms of the registration rights agreement, this prospectus generally covers the resale of 133% of the sum of (i) the shares of common stock issued to the selling securityholders and (ii) the maximum number of shares of common stock issuable upon exercise of the Warrants determined as if the outstanding Warrants were exercised in full (without regard to any limitations on exercise contained therein) as of the trading day immediately preceding the date this registration statement was initially filed with the SEC. Because the exercise price of the Warrants is subject to anti-dilution and other adjustments as set forth therein and as further described elsewhere in this prospectus, the number of shares that will actually be issued may be more or less than the number of shares being offered by this prospectus. The Warrants issued in the Private Placement Financing also provide that a selling securityholder may not exercise its Warrants to the extent (but only to the extent) such selling securityholder or any of its affiliates would beneficially own a number of shares of our common stock which would exceed 4.9%. The number of shares to be registered by this prospectus generally does not take into account any such ownership limitation.

The table below has been prepared based upon information furnished to us by the selling securityholders and, to our knowledge, is accurate as of the date of this prospectus. The selling securityholders may sell all, some or none of their shares in this offering. See the disclosure under the heading “Plan of Distribution” elsewhere in this prospectus. The selling securityholders identified in the table below may have sold, transferred or otherwise disposed of some or all of their shares since the date of this prospectus in transactions exempt from or not subject to the registration requirements of the Securities Act. Information concerning the selling securityholders may change from time to time and, if necessary, we will amend or supplement this prospectus accordingly and as required.

The table below lists the selling securityholders and other information regarding the beneficial ownership (as determined under Section 13(d) of the Exchange Act, and the rules and regulations thereunder) of our common stock by each of the selling securityholders. The second column of the table below lists the aggregate number of shares of common stock issued or issuable to the selling secuityholders, including securities acquired in the Private Placement Financing and offered by this prospectus and securities issued in transactions unrelated to the Private Placement Financing, if any, and without regard to the ownership limitations on exercise of the Warrants set forth therein. The third column of the table below lists the number of shares of common stock beneficially owned by the selling

securityholders, based on their respective ownership of shares of common stock and Warrants as of the date presented. The fourth column of the table below lists the shares of common stock being offered by this prospectus by the selling securityholders and does not take into account the ownership limitations on exercise of the Warrants set forth therein. The fifth column of the table below reflects the shares owned by each selling securityholder after completion of this offering, assuming the sale of all of the shares offered by the selling securityholders pursuant to this prospectus. The sixth column of the table below reflects the percentage of our common stock beneficially owned by each selling securityholder after completion of this offering, assuming the sale of all of the shares offered by such selling securityholder pursuant to this prospectus.

Name of Selling Securityholder	Number of Shares of Common Stock Issued and Issuable (1)	Number of Shares of Common Stock Beneficially Owned Prior to this Offering (2)	Maximum Number of Shares of Common Stock to be Sold Pursuant to this Prospectus (3)	Number of Shares of Common Stock Owned After This Offering (4)	Percentage of Shares of Common Stock Beneficially Owned After This Offering (5)
Cranshire Capital Master Fund, Ltd. (6)	12,800,000	3,200,000	12,800,000	—	—
Equitec Specialists, LLC (6)	3,200,000	800,000	3,200,000	—	—
Anson Investments Master Fund, Ltd. (7)	8,000,000	3,603,824	8,000,000	—	—
Capital Ventures International (8)	8,000,000	3,603,824	8,000,000	—	—
Heng Hong Ltd (9)	8,400,000	3,603,824	8,400,000	—	—
Punit Dhillon (10)	3,550,000	3,550,000	2,800,000	750,000	1.04 %
Ocean Creation Investments Limited (11)	800,000	800,000	800,000	—	—
Ong Kim Kiat	800,000	800,000	800,000	—	—
Karmdeep & Harpreet Bains	800,000	800,000	800,000	—	—

(1) Reflects the total number of shares of common stock issued or issuable to each selling securityholder, including (a) all securities issued in the Private Placement Financing, without regard to contractual restrictions on the exercise of the Warrants as described in footnote (2) below, all of which are being offered for resale by this prospectus, and (b) all other securities issued in transactions unrelated to the Private Placement Financing, if any, none of which are being offered for resale by this prospectus.

(2) Except as described in footnote 10 to this table, to our knowledge, none of the shares of common stock or Warrants issued to the selling securityholders in the Private Placement Financing have been sold or otherwise transferred prior to the date of this prospectus in transactions exempt from the registration requirements of the Securities Act. The Warrants issued in the Private Placement Financing provide that a selling securityholder may not exercise its Warrants to the extent (but only to the extent) such selling securityholder or any of its affiliates would beneficially own a number of shares of our common stock which would exceed 4.9%. As a result, the number of shares of common stock reflected in this column as beneficially owned by each selling securityholder includes (a) the number of outstanding shares of common stock issued to such selling securityholder in the Private Placement Financing, and (b) if any, the number of shares of common stock underlying the Warrants issued to such selling securityholder that such selling securityholder has the right to acquire without it or any of its affiliates beneficially owning more than 4.9% of our currently outstanding common stock, based on 72,067,487 outstanding shares of our common stock as of May 1, 2014.

(3) Includes all shares of common stock issued and issuable as of the date of this prospectus to the selling securityholders in connection with the Private Placement Financing, including all shares underlying the Warrants as of the date of this prospectus.

(4) Assumes that (i) all of the shares of common stock to be registered by the registration statement of which this prospectus is a part, including all shares of common stock issued and outstanding and all shares of common stock issuable upon exercise of the Warrants, are sold in this offering and (ii) the selling securityholders do not acquire additional shares of our common stock after the date of this prospectus and prior to completion of this offering.

(5) Percentage ownership for each selling securityholder is determined under Section 13(d) of the Exchange Act.

(6) Cranshire Capital Advisors, LLC (“CCA”) is the investment manager of Cranshire Master Fund and consequently has voting control and investment discretion over securities held by Cranshire Master Fund. Mitchell P. Kopin (“Mr. Kopin”), the president, the sole member and the sole member of the Board of Managers of CCA, has voting control over CCA. As a result, each of Mr. Kopin and CCA may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities held by Cranshire Master Fund which are covered hereunder.

CCA serves as the investment manager to a managed account for Equitec Specialists, LLC (“Equitec”), and CCA has voting control and investment discretion over securities held in the managed account for Equitec. As described above, Mr. Kopin has voting control over CCA. As a result, each of Mr. Kopin and CCA may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities held by Equitec which are covered hereunder. Equitec is an affiliate of a broker-dealer. Equitec acquired the shares being registered hereunder in

the ordinary course of business, and at the time of the acquisition of the shares and Warrants described herein, Equitec did not have any arrangements or understandings with any person to distribute such securities.

In the aggregate, Mr. Kopin and CCA may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of (i) 3,200,000 shares of our common stock held by Cranshire Master Fund and (ii) 800,000 shares of our common stock held in such managed account by Equitec.

The number of shares reflected in this table as beneficially owned by Cranshire Master Fund and Equitec excludes: (I) 9,600,000 shares of our common stock issuable upon exercise of Warrants held by Cranshire Master Fund (the "Master Fund Warrants") because each of the Master Fund Warrants contains a blocker provision as described in footnote 1, under which the holder thereof does not have the right to exercise the Master Fund Warrants to the extent (but only to the extent) that such exercise would result in beneficial ownership by the holder thereof or any of its affiliates of more than 4.9% of our common stock, and (II) 2,400,000 shares of our common stock issuable upon exercise of Warrants held in the managed account by Equitec (the "Equitec Warrants") because each of the Equitec Warrants contains a blocker provision as described in footnote 1, under which the holder thereof does not have the right to exercise the Equitec Warrants to the extent (but only to the extent) that such exercise would result in beneficial ownership by the holder thereof or any of its affiliates of more than 4.9% of our common stock. Without such blocker provisions, Mr. Kopin and CCA may be deemed to have beneficial ownership of 16,000,000 shares of our common stock.

(7) M5V Advisors Inc. and Frigate Ventures LP ("M5V" and "Frigate", respectively), the Co-Investment Advisers of Anson Investments Master Fund LP ("Anson"), hold voting and dispositive power over the securities held by Anson. Bruce Winson is the managing member of Admiralty Advisors LLC, which is the general partner of Frigate. Moez Kassam and Adam Spears are directors of M5V. Mr. Winson, Mr. Kassam and Mr. Spears each disclaim beneficial ownership of the securities held by Anson that are covered hereunder except to the extent of their pecuniary interest therein. The principal business address of Anson is 190 Elgin Avenue, George Town, Grand Cayman.

The number of shares reflected in this table as beneficially owned by Anson excludes 4,396,176 shares of our common stock issuable upon exercise of Warrants held by Anon because such Warrants contain a blocker provision as described in footnote (2), under which the holder thereof does not have the right to exercise the Warrants to the extent (but only to the extent) that such exercise would result in beneficial ownership by the holder thereof or any of its affiliates of more than 4.9% of our common stock.

(8) Heights Capital Management, Inc., the authorized agent of Capital Ventures International, has discretionary authority to vote and dispose of the shares held by Capital Ventures International. Martin Kobinger, in his capacity as Investment Manager of Heights Capital Management, Inc., also has investment discretion and voting power over the shares held by Capital Ventures International. As a result, each of Heights Capital Management, Inc. and Mr. Kobinger may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities held by Capital Ventures International that are covered hereunder. Mr. Kobinger disclaims any such beneficial ownership of such securities.

The number of shares reflected in this table as beneficially owned by Capital Ventures International excludes 4,396,176 shares of our common stock issuable upon exercise of Warrants held by Capital Ventures International because such Warrants contain a blocker provision as described in footnote (2), under which the holder thereof does not have the right to exercise the Warrants to the extent (but only to the extent) that such exercise would result in beneficial ownership by the holder thereof or any of its affiliates of more than 4.9% of our common stock.

Capital Ventures International is affiliated with one or more broker-dealers, none of which are currently expected to participate in the offering and resale pursuant to the prospectus contained in this registration statement of the shares held of record by Capital Ventures International. Capital Ventures International acquired the shares being registered hereunder in the ordinary course of business, and at the time of the acquisition of the shares and Warrants described herein, Capital Ventures International did not have any arrangements or understandings with any person to distribute such securities.

(9) Daniel MacMullin, in his capacity as the Managing Partner of Heng Hong Ltd, has investment discretion and voting power over the shares held by Heng Hong Ltd. As a result, Mr. McAllister may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities held by Heng Hong Ltd that are covered hereunder. Mr. McAllister disclaims any such beneficial ownership of such securities.

The number of shares reflected in this table as beneficially owned by Heng Hong Ltd excludes 4,796,176 shares of our common stock issuable upon exercise of Warrants held by Heng Hong Ltd because such Warrants contain a blocker provision as described in footnote (2), under which the holder thereof does not have the right to exercise the Warrants to the extent (but only to the extent) that such exercise would result in beneficial ownership by the holder thereof or any of its affiliates of more than 4.9% of our common stock.

(10) Mr. Dhillon may be deemed to have beneficial ownership of the following: (a) (i) 700,000 shares of common stock issued and sold to 0903746 B.C. Ltd. in the Private Placement Financing, and (ii) 2,100,000 shares of common stock underlying Warrants issued to 0903746 B.C. Ltd. in the Private Placement Financing, all of which were transferred to Punit Dhillon on February 28, 2014 in a private party transfer exempt from the registration requirements of the Securities Act pursuant to the terms of a share transfer agreement, to which we were a party solely to consent to such transfer, (b) 500,000 shares of common stock held of record by Mr. Dhillon that were issued as consideration for his past service as an advisor to us, which consulting relationship is unrelated to the Private Placement Financing and which shares are not being registered by the registration statement of which this prospectus forms a part, and (c) 250,000 shares of common stock held of record by Ms. Narinder Dhillon, Mr. Dhillon's spouse, that were transferred to 0860056 B.C. Ltd. on June 19, 2013 as Dr. Avtar Dhillon's designee to receive a portion of the 10,000,000 shares required to be transferred to Dr. Dhillon (or his designees) as a condition to the closing of the Merger and were subsequently transferred to Ms. Dhillon, the sole shareholder of 0860056 B.C. Ltd., pursuant to a share dividend effected by 0860056 B.C. Ltd. on February 28, 2014, which transactions are unrelated to the Private Placement Financing and which shares are not being registered in the registration statement of which this prospectus forms a part. Mr. Dhillon may be deemed to beneficially own the shares of common stock held of record by Ms. Narinder Dhillon, and he disclaims any beneficial ownership of such securities except to the extent of his pecuniary interest therein.

(11) Norman Winata, in his capacity as the Managing Member of Ocean Creation Investments Limited, has investment discretion and voting power over the shares held by Ocean Creation Investments Limited. As a result, Mr. Winata may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities held by Ocean Creation Investments Limited that are covered hereunder. Mr. Winata disclaims any such beneficial ownership of such securities.

Except for the ownership of the common stock and Warrants issued in the Private Placement Financing as reflected in the table above and as otherwise described in this "Selling Securityholder" section, (a) we have not made, and are not required to make, any potential payments regarding the Private Placement Financing to any selling securityholder, any affiliate of a selling securityholder, or any person with whom any selling securityholder has a contractual relationship, other than as described below and (b) none of the selling securityholders has, or has had within the past three years, any material relationship with us. Additionally, none of the selling securityholders holds any of our securities, other than those issued in the Private Placement Financing, that have been registered under the Securities Act or that are entitled to registration rights thereunder. We have also been advised that none of the selling securityholders is a broker-dealer or an affiliate of a broker-dealer, other than Equitec Specialists, LLC, and Capital Ventures International, each of which has informed us that it is an affiliate of a broker-dealer.

The holders of the Warrants issued in the Private Placement Financing have ongoing rights to exercise those Warrants. We have described the material terms of the Warrants elsewhere in this prospectus. In addition, the participants in the Private Placement Financing have ongoing registration rights related to the securities issued therein pursuant to the terms of the Registration Rights Agreement, which are described in more detail elsewhere in this prospectus.

We have made no payments, in cash or equity, to any of the selling securityholders in connection with this offering, except that we have reimbursed, or have agreed to reimburse, Cranshire Master Fund, one of the selling

securityholders, an aggregate cash amount of up to $35,000 for costs and expenses incurred by it or its affiliates in connection with the transactions contemplated by the Private Placement Financing and the registration of the securities being registered hereby. Additionally, we may be required to make certain payments to the investors in the Private Placement Financing under certain circumstances in the future pursuant to the terms of the Securities Purchase Agreement and the Registration Rights Agreement. These potential future payments include: (a) potential partial damages for failure to register the common stock issued or issuable upon exercise of Warrants; (b) amounts payable if we and our transfer agent fail to timely remove certain restrictive legends from certificates representing shares of common stock issued in the Private Placement Financing or issuable upon exercise of the Warrants; (c) expense reimbursement for the lead investor; and (d) payments in respect of claims for which we provide indemnification. We intend to comply with the requirements of the Registration Rights Agreement and do not currently expect to make any such payments; however, it is possible that such payments may be required.

The Securities Purchase Agreement entered into in connection with the Private Placement Financing grants to the investors, until the six month anniversary of the first date on which all the Registrable Securities (as defined in the Securities Purchase Agreement) are covered by one or more effective registration statements, the right to participate in any financing by us through an issuance of any of our securities up to an amount equal to the pro rata portion of the investor's subscription amount in the Private Placement Financing, on the same pricing and other terms and conditions as such subsequent financing, provided that the aggregate participation by all such investors collectively shall not exceed 50% of the subsequent financing amount. The terms and conditions of such subsequent financing shall not include any provision that requires a participating investor to agree to any restrictions on its trading of any of the shares acquired in connection with the Private Placement Financing without such investor's consent.

Determination of Offering Price

The selling securityholders will determine at what price they may sell the shares of common stock offered by this prospectus, and such sales may be made at prevailing market prices, at prices related to the prevailing market price or at privately negotiated prices.

PLAN OF DISTRIBUTION

We are registering (i) the shares of common stock issued and (ii) the shares of common stock issuable upon exercise of the Warrants, in each case, issued to the selling securityholders in the Private Placement Financing to permit the resale of these shares of common stock by the selling securityholders from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling securityholders of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

The selling securityholders may sell all or a portion of the shares of common stock held by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of common stock are sold through underwriters or broker-dealers, the selling securityholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, pursuant to one or more of the following methods:

- on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing or settlement of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales made after the date this registration statement is declared effective by the SEC that comply with the terms of the Securities Purchase Agreement;
- broker-dealers may agree with a selling securityholder to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling securityholders may also sell shares of common stock under Rule 144 promulgated under the Securities Act, if available, rather than under this prospectus. In addition, the selling securityholders may transfer the shares of common stock by other means not described in this prospectus. If the selling securityholders effect such transactions by selling shares of common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling securityholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved but, except as set forth in a supplement to this prospectus to the extent required, in the case of an agency transaction will not be in excess of a customary brokerage commission in compliance with FINRA Rule 5110 and in no event shall any broker-dealer receive fees, commissions and markups that, in the aggregate, would exceed eight percent (8%)).

In connection with sales of the shares of common stock or otherwise, the selling securityholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The selling securityholders may also sell shares of common stock short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling securityholders may also loan or pledge shares of common stock to broker-dealers that in turn may sell such shares.

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

To the extent required by the Securities Act and the rules and regulations thereunder, the selling securityholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be “underwriters” within the meaning of the Securities Act. In such event, any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. Selling securityholders who are deemed to be “underwriters” under the Securities Act (if any) will be subject to the prospectus delivery requirements of the Securities Act and may be subject to certain statutory liabilities of, including but not limited to, Sections 11, 12 and 17 of the Securities Act and Rule 10b-5 under the Exchange Act.

Each selling securityholder has informed us that it is not a registered broker-dealer and does not have any written or oral agreement or understanding, directly or indirectly, with any person to engage in a distribution of the common stock. Upon us being notified in writing by a selling securityholder that any material arrangement has been entered into with a broker-dealer for the distribution of common stock, a prospectus supplement, if required, will be distributed, which will set forth the aggregate amount of shares of common stock being distributed and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling securityholders and any discounts, commissions or concessions allowed or re-allowed or paid to broker-dealers.

Under the securities laws of some states, the shares of common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

Each selling securityholder may sell all, some or none of the shares of common stock registered pursuant to the registration statement of which this prospectus forms a part. If sold under the registration statement of which this prospectus forms a part, the shares of common stock registered hereunder will be freely tradable in the hands of persons other than our affiliates that acquire such shares.

The selling securityholders and any other person participating in such distribution will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including, without limitation, to the extent applicable, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock by the selling securityholders and any other participating person. To the extent applicable, Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock to engage in market-making activities with respect to the shares of common stock. All of the foregoing may affect the marketability of the shares of common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock.

We have agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the selling securityholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. We have also agreed to pay all expenses, including reimbursement of certain costs and expenses incurred by Cranshire Master Fund or its affiliates, associated with the registration of the shares of common stock pursuant to the Registration Rights Agreement, estimated to be $188,047 in total, including, without limitation, SEC filing fees and expenses of compliance with state securities or "blue sky" laws; provided, however, a selling securityholder will pay all underwriting discounts and selling commissions, if any.

We have further agreed to indemnify or provide contribution to the selling securityholders with respect to certain liabilities, including some liabilities under the Securities Act, in accordance with the Registration Rights Agreement. Each selling securityholder, severally and not jointly, has agreed to indemnify or provide contribution to us with respect to certain civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling securityholder specifically for use in this prospectus, in accordance with the related Registration Rights Agreement.

Use of Proceeds

We will not receive proceeds from the sale of common stock under this prospectus. We will, however, receive approximately $11,970,000 from the selling securityholders if they exercise their Warrants in full on a cash basis (assuming no adjustments are made to the exercise price or number of shares issuable upon exercise of such Warrants), which we expect we would use primarily for working capital purposes. We also expect we may use a portion of any such proceeds we may receive to satisfy our indebtedness to MLSC. Pursuant to the MLSC Loan Agreement, we must repay $1 million plus any unpaid accrued interest, accruing at a rate of 10% per annum, on the earlier of (a) the completion of a sale of substantially all of our assets, a change-of-control transaction or one or more financing transactions in which we receive net proceeds of $5,000,000 or more in a 12-month period, (b) the occurrence of an event of default by us under the MLSC Loan Agreement, or (c) September 30, 2018. Assuming repayment of the principal amount of the MLSC Loan on September 30, 2018, we anticipate paying an aggregate amount of $610,510 in accrued interest over the term of the MLSC Loan. We obtained the proceeds of the MLSC Loan on October 4, 2013 and have used, and expect to continue to use, such proceeds for working capital purposes.

The Warrant holders may exercise their Warrants at any time in accordance with the terms thereof until their expiration, as further described under "Summary—Private Placement Financing" and "Description of Securities." If there is no effective registration statement registering the resale of the shares of common stock underlying the Warrants as of certain time periods (as provided in the Warrants), the Warrant holders may choose to exercise their Warrants on a "cashless exercise" or "net exercise" basis. If they do so, we will not receive any proceeds from the exercise of the Warrants. Because the Warrant holders may exercise the Warrants at their own discretion, if at all, we cannot plan on receiving any proceeds from the exercise thereof, nor can we plan on any specific uses of any proceeds we may

receive beyond the purposes described herein. We have agreed to bear the expenses (other than any underwriting discounts or commissions or agent's commissions) in connection with the registration of the common stock being offered hereby by the selling securityholders.

DESCRIPTION OF SECURITIES

Authorized Capital Stock

Effective May 24, 2013, we amended our Articles of Incorporation to increase our authorized common stock from 75,000,000 shares to 300,000,000 shares. Other than our common stock, we have no other class or series of authorized capital stock.

Also on May 24, 2013, we effected a forward stock split, by way of a stock dividend, of our issued and outstanding shares of common stock at a ratio of 11 shares to each one issued and outstanding share. As a result, our outstanding common stock increased from 3,960,000 shares to 43,560,000 shares immediately following the forward stock split.

Common Stock Issued and Outstanding; Common Stock Being Registered Hereby

As of May 1 , 2014 there were issued and outstanding 72,076,487 shares of common stock. Of our issued and outstanding shares of common stock, we are registering under the registration statement of which this prospectus forms a part the 11,400,000 shares of common stock issued and sold to investors in the Private Placement.

Description of Common Stock

The holders of our common stock, par value $0.001 per share, are entitled to one vote per share on all matters submitted to a vote of our stockholders, including the election of directors. Our articles of incorporation do not provide for cumulative voting in the election of directors, and our amended and restated bylaws provide that directors are elected by a plurality vote of the votes cast and entitled to vote on the election of directors at any meeting for the election of directors at which a quorum is present. Matters other than the election of directors to be voted on by stockholders are generally approved if, at a duly convened stockholder meeting, the number of votes cast in favor of the action exceeds the number of votes cast in opposition to the action, unless a different vote for the action is required by applicable law, our articles of incorporation or our amended and restated bylaws. Applicable Nevada law requires any amendment to our articles of incorporation to be approved by stockholders holding shares entitling them to exercise at least a majority of the voting power of the Company. The holders of our common stock will be entitled to cash dividends as may be declared, if any, by our Board of Directors from funds available. Upon liquidation, dissolution or winding up of our Company, the holders of our common stock will be entitled to receive pro rata all assets available for distribution to the holders. All rights of our common stockholders described in this paragraph could be subject to any preferential voting, liquidation or other rights of any series of preferred stock that we may authorize and issue in the future. Our common stock is presently traded on the QB tier of the OTC Marketplace under the trading symbol “ARTH”.

Warrants and Options Issued and Outstanding

As of May 1, 2014 there were issued and outstanding:

- The Warrants issued to the investors in the Private Placement Financing to purchase up to an aggregate of 34,200,000 shares of common stock, which shares are being registered by the registration statement of which this prospectus forms a part, with a weighted average exercise price of $0.35 per share, including (i) Series A warrants to purchase 11,400,000 shares at an exercise price of $0.30 per share, (ii) Series B Warrants to purchase 11,400,000 shares at an exercise price of $0.35 per share, and (iii) Series C warrants to purchase 11,400,000 shares at an exercise price of $0.40 per share;

- A warrant issued to the MLSC in connection with the MLSC Loan Agreement to purchase up to 145,985 shares of common stock with an exercise price of $0.27 per share;

- The warrants issued in the initial and subsequent closings of the Coldstream Financing (as defined below) to purchase up to an aggregate of 4,000,000 shares of common stock with an exercise price of $0.75 per share;

-

Options granted to employees, directors and consultants under the 2013 Plan to purchase up to an aggregate of 5,447,962 shares of common stock at exercise prices ranging from $0.19 to $0.40 per share and with a weighted average exercise price of $0.37.

Description of Warrants Whose Underlying Common Stock is Being Registered Hereby

Each of the investors participating in the Private Placement Financing was issued a Series A warrant, a Series B warrant and a Series C warrant, each to purchase up to a number of shares of our common stock equal to 100% of the shares of common stock purchased by such investor in such financing. The Series A warrants have an exercise price of $0.30 per share, are exercisable immediately upon their issuance and have a term of exercise equal to five years after their issuance date. The Series B warrants have an exercise price of $0.35 per share, are exercisable immediately upon their issuance and have a term of exercise equal to the shorter of 12 months after their issuance date and six months after the first date on which the resale of all Registrable Securities (as defined in the Securities Purchase Agreement) is covered by one or more effective registration statements. The Series C warrants have an exercise price of $0.40 per share, are exercisable immediately upon their issuance and have a term of exercise equal to the shorter of 18 months after their issuance date and nine months after the first date on which the resale of all Registrable Securities (as defined in the Securities Purchase Agreement) is covered by one or more effective registration statements. The number of shares of our common stock into which each of the Warrants is exercisable and the exercise price therefor are subject to adjustment as set forth in the Warrants, including, without limitation, adjustment to the exercise price of the Warrants in the event of certain subsequent issuances and sales of shares of our common stock (or securities convertible or exercisable into shares of our common stock) at a price per share lower than the then-effective exercise price of the Warrants, in which case the exercise price of the Warrants will be adjusted to equal such lower price per share, as well as customary adjustments in the event of stock dividends and splits, subsequent rights offerings and pro rata distributions to our common stockholders. The Warrants also provide that they shall not be exercisable in the event and to the extent that the exercise thereof would result in the holder of the Warrant or any of its affiliates beneficially owning more than 4.9% of our common stock.

On the date of our entry into the Securities Purchase Agreement, the Series A warrants and Series B warrants had an exercise price lower than the market value of our common stock, which closed at $0.38 on the OTCQB, resulting in an aggregate discount to the market price of our common stock of $912,000 for the Series A warrants and $342,000 for the Series B warrants on that date. The Series C warrants were issued with an exercise price higher than the market value of our common stock on the date of our entry into the Securities Purchase Agreement, and therefore did not have any discount to the market price of our common stock as of such date. The tables below indicate the total possible discount to the market price of our common stock as of January 30, 2014 for the shares of our common stock underlying the Series A warrants and the Series B warrants, as well as similar information for the Series C warrants. The last trading price of our common stock on the OTCQB on February 4, 2014, the date of the closing of the Private Placement Financing, was $0.30. As a result, as of such date, there was no discount to the market price of our common stock for the Series A warrants, Series B warrants or Series C warrants. Additionally, all of the Warrants have an exercise price that is higher than the closing price of our common stock on May 1, 2014, which closed at $0.28 on such date.

Series A Warrants

Market price per share of our common stock on January 30, 2014, the date of the Securities Purchase Agreement:	$0.38
Exercise price per share of the Series A warrants on the date of issuance and as of the date of this prospectus:	$0.30
Total possible shares of common stock underlying the Series A warrants on the date of issuance and as of the date of this prospectus:	11,400,000
Aggregate market price of all shares of common stock underlying the Series A warrants, based on the market price of our common stock on January 30, 2014:	$4,332,000
Aggregate exercise price of all shares of common stock underlying the Series A warrants, based on the exercise price on the date of issuance and as of the date of this prospectus:	$3,420,000
Total possible discount of the exercise price of the Series A warrants to the market price of our common stock as of January 30, 2014:	$912,000

Series B Warrants

Market price per share of our common stock on January 30, 2014, the date of the Securities Purchase Agreement:	$ 0.38
Exercise price per share of the Series B warrants on the date of issuance and as of the date of this prospectus:	$ 0.35

Total possible shares of common stock underlying the Series B warrants on the date of issuance and as of the date of this prospectus:	11,400,000
Aggregate market price of all shares of common stock underlying the Series B warrants, based on the market price of our common stock on January 30, 2014:	$ 4,332,000
Aggregate exercise price of all shares of common stock underlying the Series B warrants, based on the exercise price on the date of issuance and as of the date of this prospectus:	$ 3,990,000
Total possible discount of the exercise price of the Series B warrants to the market price of our common stock as of January 30, 2014:	$ 342,000

Series C Warrants

Market price per share of our common stock on January 30, 2014, the date of the Securities Purchase Agreement:	$ 0.38
Exercise price per share of the Series B warrants on the date of issuance and as of the date of this prospectus:	$ 0.40
Total possible shares of common stock underlying the Series C warrants on the date of issuance and as of the date of this prospectus:	11,400,000
Aggregate market price of all shares of common stock underlying the Series C warrants, based on the market price of our common stock on January 30, 2014:	$ 4,332,000
Aggregate exercise price of all shares of common stock underlying the Series C warrants, based on the exercise price on the date of issuance and as of the date of this prospectus:	$ 4,560,000

Description of Other Warrants

Warrants Issued in the Coldstream Financing

On April 19, 2013, we entered into a financing agreement with Coldstream Summit Ltd. (“Coldstream”) pursuant to which we agreed to issue and sell, and Coldstream agreed to purchase or assist in securing the purchase of, $2,000,000 worth of units at a price per share of $0.50 per unit (the “Coldstream Financing”) during the 12-month period following the closing of the Merger. Each such unit was to consist of (i) one share of common stock and (ii) one warrant to purchase one share of common stock. As of the date of this prospectus, we have issued to Coldstream and one or more foreign accredited investors all of the units to be issued and sold in the Coldstream Financing, resulting in our issuance of warrants to acquire up to an aggregate of 4,000,000 shares of our common stock. All of the warrants issued in the Coldstream Financing have an exercise price of $0.75 per share, are exercisable immediately, and have a term of exercise of 12 months following the date of their issuance. The shares issuable upon exercise of the warrants are subject to adjustment for stock splits, stock dividends, reclassifications, reorganizations or other changes of the outstanding securities of the Company.

Warrant Issued to MLSC

In connection with and as a condition of the MLSC Loan Agreement, on September 30, 2013, we issued to MLSC a warrant (the “MLSC Warrant”) to purchase 145,985 shares of our common stock at an exercise price of $0.274 per

share. The MLSC Warrant has been issued as partial consideration for the funding provided under the MLSC Loan Agreement and for no separate consideration. The MLSC Warrant is exercisable immediately upon its issuance and expires on the earlier of September 30, 2023 and the completion of a sale of substantially all of our assets or a change-of-control transaction.

Registration Rights Agreement

On February 4, 2014, we entered into the Registration Rights Agreement with the investors in the Private Placement Financing pursuant to which we became obligated to file with the SEC on or before March 21, 2014 one or more registration statements to register for resale under the Securities Act (i) the shares of common stock issued and underlying the Warrants issued in the Private Placement Financing, plus (ii) an additional number of shares of common stock equal to 33% of the total number of shares of common stock issued and underlying the Warrants issued in the Private Placement Financing, to account for adjustments, if any, to the number of shares underlying the Warrants as provided therein and as described above. As a result, we are registering for resale under this registration statement the 45,600,000 shares of common stock issued and underlying the Warrants issued in the Private Placement Financing, together with an additional 15,048,000 shares of common stock that may never become issuable by us if no such adjustments occur. Pursuant to our filing of this registration statement, we are in compliance with such filing obligation under the registration rights agreement. Our failure to satisfy certain other deadlines with respect to this registration statement, including with respect to the effectiveness hereof, and certain other requirements set forth in the registration rights agreement may require us to pay monetary penalties.

Under the Registration Rights Agreement, subject to exception in certain circumstances, we have agreed to keep this registration statement effective until the earlier of the date on which all shares of common stock to be registered hereunder have been sold or may be sold without restriction pursuant to Rule 144 promulgated under the Securities Act ("Rule 144"). If there is not an effective registration statement covering the resale of any of the shares to be registered hereunder at any time during the period required by the Registration Rights Agreement, then the selling securityholders will have "piggyback" registration rights with respect to any such shares that are not eligible for resale pursuant to Rule 144 in connection with any other registration statement we determine to file that would permit the inclusion of those shares.

Transfer Agent

The transfer agent for our common stock is Empire Stock Transfer. Our transfer agent's address is 1859 Whitney Mesa Drive, Henderson, Nevada 89014.

Anti-Takeover Provisions of Nevada State Law

Some features of the Nevada Revised Statutes ("NRS"), which are further described below, may have the effect of deterring third parties from making takeover bids for control of us or may be used to hinder or delay a takeover bid. This would decrease the chance that our stockholders would realize a premium over market price for their shares of common stock as a result of a takeover bid.

Acquisition of Controlling Interest

The NRS contain provisions governing acquisition of a controlling interest of a Nevada corporation. These provisions provide generally that any person or entity that acquires a certain percentage of the outstanding voting shares of a Nevada corporation may be denied voting rights with respect to the acquired shares, unless certain criteria are satisfied. Our amended and restated bylaws provide that these provisions will not apply to us or to any existing or future stockholder or stockholders.

Combination with Interested Stockholder

The NRS contain provisions governing combinations of a Nevada corporation that has 200 or more stockholders of record with an "interested stockholder." These provisions only apply to a Nevada corporation that, at the time the potential acquirer became an interested stockholder, has a class or series of voting shares listed on a national securities exchange, or has a class or series of voting shares traded in an "organized market" and satisfies certain specified public float and stockholder levels. As we do not now meet those requirements, we do not believe that these provisions are currently applicable to us. However, to the extent they become applicable to us in the future, they may have the effect of delaying or making it more difficult to affect a change in control of the Company in the future.

A corporation affected by these provisions may not engage in a combination within two years after the interested stockholder acquires his, her or its shares unless the combination or purchase is approved by the board of directors before the interested stockholder acquired such shares. Generally, if approval is not obtained, then after the expiration of the two-year period, the business combination may be consummated with the approval of the board of directors before the person became an interested stockholder or a majority of the voting power held by disinterested stockholders, or if the consideration to be received per share by disinterested stockholders is at least equal to the highest of:

- the highest price per share paid by the interested stockholder within the three years immediately preceding the date of the announcement of the combination or within three years immediately before, or in, the transaction in which he, she or it became an interested stockholder, whichever is higher;
- the market value per share on the date of announcement of the combination or the date the person became an interested stockholder, whichever is higher; or
- if higher for the holders of preferred stock, the highest liquidation value of the preferred stock, if any.

Generally, these provisions define an interested stockholder as a person who is the beneficial owner, directly or indirectly of 10% or more of the voting power of the outstanding voting shares of a corporation, and define combination to include any merger or consolidation with an interested stockholder, or any sale, lease, exchange, mortgage, pledge, transfer or other disposition, in one transaction or a series of transactions with an interested stockholder of assets of the corporation:

- having an aggregate market value equal to 5% or more of the aggregate market value of the assets of the corporation;
- having an aggregate market value equal to 5% or more of the aggregate market value of all outstanding shares of the corporation; or
- representing 10% or more of the earning power or net income of the corporation.

Liability and Indemnification of Directors and Officers

The NRS empower us to indemnify our directors and officers against expenses relating to certain actions, suits or proceedings as provided for therein. In order for such indemnification to be available, the applicable director or officer must not have acted in a manner that constituted a breach of his or her fiduciary duties and involved intentional misconduct, fraud or a knowing violation of law, or must have acted in good faith and reasonably believed that his or her conduct was in, or not opposed to, our best interests. In the event of a criminal action, the applicable director or officer must not have had reasonable cause to believe his or her conduct was unlawful.

We have not entered into separate indemnification agreements with our directors and officers. Our amended and restated bylaws provide that we shall indemnify any director or officer to the fullest extent authorized by the laws of the State of Nevada. Our amended and restated bylaws further provide that we shall pay the expenses incurred by an officer or director (acting in his capacity as such) in defending any action, suit or proceeding in advance of the final disposition of such action, suit or proceeding, subject to the delivery to us by or on behalf of such director or officer of an undertaking to repay the amount of such expenses if it shall ultimately be determined that he or she is not entitled to be indemnified by us as authorized in our bylaws or otherwise.

The NRS further provide that a corporation may purchase and maintain insurance or make other financial arrangements on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise for any liability asserted against him and liability and expenses incurred by him in his capacity as a director, officer, employee or agent, or arising out of his status as such, whether or not the corporation has the authority to indemnify him against such liability and expenses. We have secured a directors' and officers' liability insurance policy. We expect that we will continue to maintain such a policy.

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

MARKET PRICE OF AND DIVIDENDS ON COMMON STOCK AND RELATED MATTERS

Market Information

Our common stock is currently quoted on the OTCQB over-the-counter quotation system. Our common stock is currently quoted on the OTCQB and the over-the-counter bulletin board ("OTCBB") quotation systems. Our common stock began quotation on the OTCBB and the OTCQB on June 27, 2012 and since that date has been primarily traded on the OTCQB. There was no trading of our common stock on the OTCBB, OTCQB or any other over-the-counter market prior to January 2, 2013. Although our common stock is currently quoted on the OTCQB, there is a limited trading market for our common stock and there have been few trades in our common stock to date. Because our common stock is thinly traded, any reported sale prices may not be a true market-based valuation of our common stock.

The table below sets forth reported high and low closing bid quotations for our common stock for the fiscal quarters indicated as reported on the OTCQB. The quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions.

	High	Low
Fiscal Year Ended September 30, 2012		
First Quarter ended December 31, 2011*	—	—
Second Quarter ended March 31, 2012*	—	—
Third Quarter ended June 30, 2012*	—	—
Fourth Quarter ended September 30, 2012*	—	—
Fiscal Year Ended September 30, 2013		
First Quarter ended December 31, 2012*	—	—
Second Quarter ended March 31, 2013*	—	—
Third Quarter ended June 30, 2013 #	$ 6.00	$ 0.54
Fourth Quarter ended September 30, 2013	$ 1.36	$ 0.31
Fiscal Year Ending September 30, 2014		
First Quarter ended December 31, 2013	$ 0.33	$ 0.16
Second Quarter ended March 31, 2014	$ 0.44	$ 0.29
Third Quarter ending June 30, 2014 (through May 1, 2014)	$ 0.34	$ 0.22

* There was no market for our common stock during this period.

There was no market for our common stock during portions of this period.

Holders

As of May 1, 2014, there were approximately 71 holders of record of our common stock.

Dividends

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

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

The following discussion and analysis should be read in conjunction with our consolidated financial statements and notes thereto included elsewhere in this prospectus. This discussion and analysis contains forward looking statements. We make forward-looking statements, as defined by the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, and in some cases, you can identify these statements by forward-looking words such as "if," "will," "may," "might," "will likely result," "should," "expect," "plan," "anticipate," "believe," "estimate," "project," "intend," "goal," "objective," "predict," "potential" or "continue," or the negative of these terms and other comparable terminology. These forward-looking statements, which are based on various underlying assumptions and expectations and are subject to risks, uncertainties and other unknown factors, may include projections of our future financial performance based on our growth strategies and anticipated trends in our business. These statements are only predictions based on our current expectations and projections about future events that we believe to be reasonable. There are important factors that could cause our actual results, level of activity, performance or achievements to differ materially from the historical or future results, level of activity, performance or achievements expressed or implied by such forward-looking statements. These factors include, but are not limited to, those discussed under the caption "Risk Factors" in this prospectus. We undertake no duty to update any of these forward-looking statements after the date of filing of this prospectus to conform such forward-looking statements to actual results or revised expectations, except as otherwise required by law.

Corporate Overview

Arch Therapeutics, Inc. (as used in this discussion and analysis, unless otherwise indicated, "Company", "we", "us", "our", and "Arch" refer to Arch Therapeutics, Inc. and its consolidated subsidiary, Arch Biosurgery, Inc.) was incorporated under the laws of the State of Nevada on September 16, 2009 with the name "Almah, Inc." to pursue the business of distributing automobile spare parts online. Effective June 26, 2013, Arch completed a merger (the "Merger") with Arch Biosurgery, Inc. (formerly known as Arch Therapeutics, Inc.), a Massachusetts corporation ("ABS"), and Arch Acquisition Corporation ("Merger Sub"), Arch's wholly owned subsidiary formed for the purpose of the transaction, pursuant to which Merger Sub merged with and into ABS and ABS thereby became the wholly owned subsidiary of Arch. Prior to the completion of the Merger, Arch was a "shell company" under applicable rules of the Securities and Exchange Commission (the "SEC") and had no or nominal assets or operations. Upon its acquisition of ABS, Arch abandoned its prior business plan and changed its operations to the business of a life science medical device company. For financial reporting purposes, the Merger represents a "reverse merger" rather than a business combination and ABS is deemed to be the accounting acquirer in the transaction and the predecessor of Arch. Consequently, the assets, liabilities, deficit accumulated during the development stage and the historical operations that are reflected in the Company's consolidated financial statements are those of ABS. All share information has been restated to reflect the effects of the Merger. The Company's financial information has been consolidated with that of ABS after consummation of the Merger on June 26, 2013, and the historical financial statements of the Company before the Merger have been replaced with the historical financial statements of ABS before the Merger in this prospectus, and will be so replaced in all future filings with the SEC that require financial statements to be included.

ABS was incorporated under the laws of the Commonwealth of Massachusetts on March 6, 2006 as Clear Nano Solutions, Inc., changed its name to Arch Therapeutics, Inc. on April 7, 2008, and changed its name from Arch Therapeutics, Inc. to Arch Biosurgery, Inc. upon the closing of the Merger on June 26, 2013.

Liquidity

We are in the development stage and have generated no operating revenues to date and do not expect to do so in the foreseeable future due to the early stage nature of our current product candidates. We currently have no products that have obtained marketing approval in any jurisdiction, we have not generated revenues since inception, we had net losses for the year ended September 30, 2013 and for the three months ended December 31, 2013 of $1,853,791, $808,441, respectively, and we had an accumulated deficit as of September 30, 2013 of $4,631,871. We are currently devoting substantially all of its efforts toward product research and development. As further discussed in “Liquidity and Capital Resources” below, we will need to raise substantial additional funds in order to continue operating our business.

Business Overview

We are a life science medical device company in the development stage with limited operations to date. We aim to develop products that make surgery and interventional care faster and safer by using a novel approach that stops bleeding (referenced as "hemostasis"), controls leaking (referenced as "sealant"), and provides other advantages during surgery and trauma care. Our core technology is based on a self-assembling peptide solution that creates a physical, mechanical barrier, which could be applied to seal organs or wounds that are leaking blood and other fluids. We believe our technology could support an innovative platform of potential products in the field of stasis and barrier applications. Our lead product candidate, AC5 Surgical Hemostatic Device™ (which we sometimes refer to as "AC5"), is designed to achieve hemostasis in minimally invasive and open surgical procedures, and we hope to develop other hemostatic or sealant product candidates in the future based on our self-assembling peptide technology platform. Our plan and business model is to develop products that apply that core technology to use with human bodily fluids and connective tissues.

Our primary product candidate, AC5, relies on this technology and is designed to achieve hemostasis during surgical procedures. AC5 is designed to be a biocompatible synthetic peptide comprising naturally occurring amino acids. When applied to a wound, AC5 intercalates into the interstices of the connective tissue where it self-assembles into a physical, mechanical structure that provides a barrier to leaking substances, such as blood. We believe that the results of early data from preclinical animal tests have shown quick and effective hemostasis with the use of AC5 relative to other types of hemostatic agents. AC5 is designed for direct application as either a liquid or a spray, which we believe will make it user-friendly and able to conform to irregular wound geometry. Additionally, AC5 is not sticky or glue-like, which we believe will enhance its utility in the setting of minimally invasive and laparoscopic surgeries. Further, AC5 is transparent, which should make it easier for surgeons or other healthcare providers to maintain a clear field of vision during a surgical procedure and prophylactically stop bleeding as it starts, which we call Crystal Clear Surgery™.

We have devoted much of our operations to date to the development of our core technology, including selecting our lead product composition, conducting initial safety and other related tests, generating scale-up, reproducibility and manufacturing and formulation methods, and developing and protecting the intellectual property rights underlying our technology platform. Formulation optimization is an important part of peptide development. AC5 formulation optimization, which is done with extensive collaboration among our team and partners, is focused on optimizing traditional product parameters to target specifications covering performance, physical appearance, stability, and handling characteristics, among others. Arch intends to monitor formulation optimization closely, as success or failure in setting and realizing appropriate specifications may directly impact our anticipated clinical trial and subsequent commercialization timeline.

Our long-term business plan includes the following goals:

- conducting successful biocompatibility studies and, subsequently, clinical trials on AC5;

- obtaining regulatory approval or certification of AC5 in the European Union, the U.S., and other jurisdictions as we may determine;

- expanding our intellectual property portfolio;

- developing appropriate third party relationships to manufacture, distribute, market and otherwise commercialize AC5; and

- developing additional product candidates in the hemostatic and sealant field.

In furtherance of our long-term business goals, we expect to focus on the following activities during the next twelve months:

- expand our team during the second calendar quarter by hiring a Vice President of Research and Development Engineering, adding additional quality systems expertise, and hiring a full time Chief Financial Officer in order to meet the Company's growing needs, which we anticipate will require approximately $400,000 for salary and related expenses during calendar year 2014;

- expand and enhance our intellectual property portfolio by filing new patent applications, obtaining allowances on currently filed patent applications, and adding to our trade secrets in self-assembly, manufacturing, analytical methods and formulation, which activities will be ongoing as we seek to expand our product candidate portfolio and which we anticipate will require approximately $250,000 during calendar year 2014;

- select a large scale manufacturing partner for scale-up and initiate production of product compliant with current good manufacturing practices ("cGMP"), which we anticipate will start in the third calendar quarter of 2014 and will require approximately $750,000 during the next twelve months;

- select a Notified Body for European regulatory pathway, confirm CE mark pathway plan for Europe, and participate in related regulatory meetings, which activities we anticipate will start during the second calendar quarter of 2014, continue throughout the balance of the year, and require approximately $200,000 during calendar year 2014. For a description of the CE mark pathway and European Notified Bodies, see “Business–Regulation by the FDA and Similar Foreign Agencies–Pre-Marketing Regulation in the EU”;

- identify and select additional pipeline candidates from self-assembling peptide platform for advancement into development, which activities will be ongoing as we seek to expand our product candidate portfolio and which we anticipate will require approximately $200,000 during calendar year 2014;

- conduct both informal and formal biocompatibility studies during the second and third calendar quarters of 2014, which we anticipate will require approximately $250,000 during calendar year 2014;

- develop initial clinical trial protocols, complete Clinical Investigational Plan with key opinion leaders and principal investigators and submit application to Ethics Committee, which activities we anticipate will occur during the second half of 2014 and require approximately $300,000 during calendar year 2014;

- commence a human clinical trial, the timeframe for which is dependent upon successful completion of certain manufacturing, regulatory, and biocompatibility activities. Based on current expectations, we estimate such a trial could be commenced as early as the fourth calendar quarter of 2014. We anticipate these activities will require approximately $1,000,000 over the course of the trial; and

- seek to raise additional funding when and as needed to support the milestones described above and our operations generally. The anticipated costs of our activities described above totals approximately $3.35 million over the next 12 months. The net proceeds to us of the Private Placement Financing, which totaled approximately $2.68 million, are being used, and are expected to continue to be used, to fund these activities. We will need to raise additional funds in the near term in order to support our business and the operational activities described above. See "Liquidity and Capital Resources" below for further information.

Recent Developments

Private Placement Financing

On January 30, 2014, we entered into a Securities Purchase Agreement with nine accredited investors providing for our issuance and sale to such investors, in a private placement, of an aggregate of 11,400,000 shares of our common stock at a purchase price of $0.25 per share and three series of warrants, the Series A warrants, the Series B warrants and the Series C warrants, to purchase up to an aggregate of 34,200,000 shares of our common stock (collectively, the “Warrants”), for aggregate gross proceeds to us of $2.85 million (the “Private Placement Financing”). We did not engage

any underwriter or placement agent in connection with the Private Placement Financing. The Private Placement Financing closed on February 4, 2014.

Upon the closing of the Private Placement Financing, we issued to each investor therein a Series A warrant, a Series B warrant and a Series C warrant, each to purchase up to a number of shares of our common stock equal to 100% of the shares of common stock purchased by such investor in such financing. The Series A warrants have an exercise price of $0.30 per share, are exercisable immediately upon their issuance and have a term of exercise equal to five years after their issuance date. The Series B warrants have an exercise price of $0.35 per share, are exercisable immediately upon their issuance and have a term of exercise equal to the shorter of 12 months after their issuance date and six months after the effective date of the registration statement of which this prospectus forms a part. The Series C warrants have an exercise price of $0.40 per share, are exercisable immediately upon their issuance and have a term of exercise equal to the shorter of 18 months after their issuance date and nine months after the effective date of the registration statement of which this prospectus forms a part. The Warrants provide for the adjustment of the number of shares of common stock underlying the Warrants and/or the exercise price of the Warrants under certain circumstances as set forth therein, and the limitation of the exercisability of the Warrants in the event and to the extent that such exercise would result in the holder of the Warrant or any of its affiliates beneficially owning more than 4.9% of our common stock.

Also upon the closing of the Private Placement Financing, we entered into a Registration Rights Agreement with the investors in such financing pursuant to which we became obligated to file with the SEC on or before March 21, 2014 one or more registration statements to register for resale under the Securities Act of 1933, as amended, (i) the shares of common stock issued and underlying the Warrants issued in the Private Placement Financing, plus (ii) an additional number of shares of common stock equal to 33% of the total number of shares of common stock issued and underlying the Warrants issued in the Private Placement Financing, to provide for potential adjustments to the number of shares underlying the Warrants as provided therein.

MLSC Loan Agreement and Warrant

On September 30, 2013, we entered into the Life Sciences Accelerator Funding Agreement (the “MLSC Loan Agreement”) with the Massachusetts Life Sciences Center (“MLSC”), pursuant to which MLSC agreed to provide us an unsecured subordinated loan, and we issued to MLSC a related promissory note, in principal amount of $1,000,000 (such loan, the “MLSC Loan”). We received the full amount of the MLSC Loan on October 4, 2013. The MLSC Loan bears interest at a rate of 10% per annum, and will become fully due and payable on the earlier of (i) September 30, 2018, (ii) the occurrence of an event of default under the MLSC Loan Agreement, or (iii) the completion of a sale of substantially all of our assets, a change-of-control transaction or one or more financing transactions in which we receive net proceeds of $5,000,000 or more in a 12-month period. We may, at our election and without penalty, repay the MLSC Loan in whole or in part at any time prior to its maturity date. Pursuant to the terms of the MLSC Loan Agreement, we may use the proceeds of the MLSC Loan solely to fund working capital requirements and/or the purchase of capital assets in the life sciences field, and we are expressly prohibited from using any such proceeds for any severance payment, investment in certain securities or payment for goods or services to a related party of the Company. The MLSC Loan Agreement also provides that, for so long as any of the MLSC Loan remains outstanding, our headquarters and at least a majority of our employees must be located in Massachusetts and we must not take certain actions without obtaining MLSC’s prior consent, including without limitation paying dividends on our capital

stock, redeeming any of our outstanding securities, incurring certain types and amounts of additional indebtedness, and completing a sale of substantially all of our assets or a change-of-control transaction.

In connection with and as a condition of the MLSC Loan Agreement, on September 30, 2013, we issued to MLSC a warrant (the "MLSC Warrant") to purchase 145,985 shares of our common stock at an exercise price of $0.274 per share. The MLSC Warrant has been issued as partial consideration for the funding provided under the MLSC Loan Agreement and for no separate consideration. The MLSC Warrant is exercisable immediately upon its issuance and expires on the earlier of September 30, 2023 and the completion of a sale of substantially all of our assets or a change-of-control transaction.

Coldstream Financing

On April 19, 2013, we entered into a financing agreement with Coldstream Summit Ltd. ("Coldstream") pursuant to which we agreed to issue and sell, and Coldstream agreed to purchase or assist in securing the purchase of, $2,000,000 worth of units in a private offering within the 12-month period following the closing of the Merger (the "Coldstream Financing"). Each unit issued in the Coldstream Financing was sold at a price of $0.50 per share and consisted of (i) one share of common stock and (ii) one warrant to purchase one share of common stock at an exercise price of $0.75 per share and with a term of 12 months. On June 26, 2013, we issued and sold units consisting of 2,500,000 shares of common stock and warrants to purchase 2,500,000 shares of common stock in the Coldstream Financing to a foreign accredited investor, for aggregate gross proceeds of $1,250,000. On July 3, 2013, we issued and sold additional units consisting of 500,000 shares of common stock and warrants to purchase 500,000 shares of common stock to a foreign accredited investor for gross proceeds of $250,000. On August 30, 2013, we issued and sold additional units consisting of 1,000,000 shares of common stock and warrants to purchase 1,000,000 shares of common stock to a foreign accredited investor for gross proceeds of $500,000. Following such issuance and sale on August 30, 2013, Coldstream has satisfied its obligations in connection with the Coldstream Financing and we have received all aggregate gross proceeds thereunder, totaling $2,000,000.

Merger with ABS and Related Activities

On June 26, 2013, the Company completed the Merger with ABS, pursuant to which ABS became a wholly owned subsidiary of the Company. As a result of the acquisition of ABS, the Company has abandoned its prior business plan and has changed its operations to that of a life science medical device company. The Company is in the development stage and has generated no operating revenues to date. The Company is currently devoting substantially all of its efforts toward product research and development.

In contemplation of the Merger, effective May 24, 2013, the Company increased its authorized common stock from 75,000,000 shares to 300,000,000 shares and effected a forward stock split, by way of a stock dividend, of its issued and outstanding shares of common stock at a ratio of 11 shares to each one issued and outstanding share. Also in contemplation of the Merger, effective June 5, 2013, the Company changed its name from Almah, Inc. to Arch Therapeutics, Inc.

In connection with the Merger, our Board of Directors and management team has undergone significant changes in connection with the appointment of ABS's management team to similar roles with our Company. On April 23, 2013, our former President, Chief Executive Officer and sole director Joey Power resigned from all of his positions with the Company, and Dr. Terrence W. Norchi was appointed as our President and Chief Executive Officer and a member of our Board of Directors and Dr. Avtar Dhillon was appointed as an independent member of our Board of Directors. On June 26, 2013, Alan T. Barber was appointed as our Chief Financial Officer and Dr. Arthur L. Rosenthal was appointed as an independent member of our Board of Directors. On July 8, 2013, William Cotter was appointed as our Chief Operating Officer. All of those individuals held the same or similar positions with ABS prior to the completion of the Merger, with the exception of Mr. Cotter, who provided advisory services to ABS before the Merger.

Results of Operations

The period to period comparisons of our results of operations that follow are not necessarily indicative of future results.

Three Months Ended December 31, 2013 Compared to Three Months Ended December 31, 2012

	December 31, 2013 ($)	December 31, 2012 ($)	Increase (Decrease) ($)
Revenue	$-	$-	$-
Operating Expenses			
General and Administrative	523,443	161,974	361,469
Research and Development	257,233	-	253,233
(Loss) from Operations	(780,676)	(161,974)	685,402
Other Income (Expense)	(27,765)	(42,981)	(15,216)
Net Income (Loss)	$(804,441)	$(204,955)	$599,486

Revenue

We did not generate revenue in either of the three months ended December 31, 2013 or 2012.

General and Administrative Expense

We incurred general and administrative expenses during the three months ended December 31, 2013 in the amount of $523,443, compared to general and administrative expenses incurred during the three months ended December 31, 2012 in the amount of $161,974 (an increase of $361,469). General and administrative expenses during the three months ended December 31, 2013 primarily included legal fees, patent prosecution costs, payroll related expenses, stock based compensation and office overhead. General and administrative expenses during the three months ended December 31, 2012 primarily included legal fees, patent prosecution costs, and office overhead. The increase in general and administrative expense period over period is primarily attributable to increased costs associated with legal fees, accounting fees and investor relations expenses incurred in connection with being a public company, which were partially offset by a decrease in patent prosecution costs.

General and administrative expenses are generally expected to increase as a result of plans to ramp up operations and requirements to comply with public company reporting obligations. We expect increased expenses related to plans to hire additional personnel and consultants and expected incurrence of additional legal fees.

Research and Development Expense

We incurred research and development expenses during the three months ended December 31, 2013 in the amount of $257,233. Due to limited resources, we did not incur research and development expenses during the three months ended December 31, 2012. Research and development expenses primarily relate to our activities to develop our primary product candidate, and are comprised mostly of payroll related expenses stock based compensation and formulation contractors.

Research and development expenses are expected to increase as a result of plans to pursue additional preclinical and clinical studies and otherwise relating to development of our primary product candidate.

Other Income (Expense)

We incurred total other expenses during the three months ended December 31, 2013 in the amount of $27,765, compared to total other expenses incurred during the three months ended December 31, 2012 in the amount of $42,981 (a decrease of $15,216). Other expenses during those periods were primarily interest accrued on debt. The decrease in other expense between periods is attributable to the repayment of related party notes payable and conversion of other notes into equity in connection with the Merger, both of which were partially offset by interest on the loan obtained from MLSC.

Year Ended September 30, 2013 Compared to Year Ended September 30, 2012

	September 30, 2013	September 30, 2012	Increase (Decrease)
Revenue	$-	$-	$-
Operating Expenses			
General and Administrative	1,526,075	333,503	1,192,572
Research and Development	218,901	87,021	131,880
Loss from Operations	1,744,976	420,524	1,324,452
Other Expense	108,815	156,387	47,572
Net Loss	1,853,791	576,911	1,276,880

Revenue

We did not generate any revenue in either of the years ended September 30, 2013 or 2012.

General and Administrative Expense

We incurred general and administrative expense during the year ended September 30, 2013 in the amount of $1,526,075, compared to general and administrative expense incurred during the year ended September 30, 2012 in the amount of $333,503 (an increase of $1,192,672). Our general and administrative expenses during those periods primarily included legal fees, patent prosecution costs, payroll related expenses, license maintenance fees, professional fees and office overhead. The increase in general and administrative expense period over period is primarily attributable to hiring additional administrative personnel and increased costs associated with legal and accounting fees incurred in connection with the Merger partially offset by a decrease in patent prosecution costs.

General and administrative expenses are generally expected to increase as a result of plans to ramp up operations and requirements to comply with public company reporting obligations. We also expect increased expenses related to plans to hire additional personnel and consultants and expected incurrence of additional legal fees.

Research and Development Expense

We incurred research and development expense during the year ended September 30, 2013 in the amount of $218,901, compared to research and development expense incurred during the year ended September 30, 2012 in the amount of $87,021 (an increase of $131,880). Our research and development expenses primarily relate to our activities to develop our primary product candidate, and are comprised of payroll related expenses, advisor fees and cost of materials. The increase in research and development expense between periods is primarily attributable to hiring additional research and development personnel and an increase in materials used in the development of our lead product candidate.

Research and development expenses are expected to increase as a result of plans to pursue additional preclinical and clinical studies and otherwise relating to development of our primary product candidate.

Other Expense

We incurred total other expenses during the year ended September 30, 2013 in the amount of $108,815 compared to total other expenses incurred during the year ended September 30, 2012 in the amount of $156,387 (a decrease of $47,572). Other expenses during those periods were primarily interest accrued on debt. The decrease in other expense between periods is attributable to suspension of interest accrual beyond April 30, 2013 in connection with the exchange of debt for equity in the Merger.

Liquidity and Capital Resources

Working Capital

As of December 31, 2013, total current assets were $985,027, compared to total current assets of $1,576,948 as of September 30, 2013 (a decrease of $591,921). The decrease was primarily due to the use of cash to pay operating expenses incurred during the quarter, including the use of a portion of the proceeds of the MLSC Loan, which were received in full on October 4, 2013 pursuant to the MLSC Loan Agreement dated September 30, 2013. Our total current assets as of December 31, 2013 were comprised primarily of cash and prepaid expenses.

As of December 31, 2013, total current liabilities were $512,801, compared to total current liabilities of $455,609 as of September 30, 2013 (an increase of $57,192). The increase was primarily due to an increase in accrued expenses related to legal and accounting fees associated with being a public reporting entity, directors' fees and consulting fees. Our total current liabilities as of December 31, 2013 were comprised primarily of accounts payable and accrued expenses.

As a result, on December 31, 2013, we had positive working capital of $472,226, compared with positive working capital as of September 30, 2013 of $1,121,339.

Cash Flow

Our cash on-hand as of December 31, 2013 was $945,398, compared to cash on-hand as of September 30, 2013 of $557,319 (an increase of $389,079). The increase was primarily due to receipt of funds under the MLSC Loan Agreement offset by operating expenditures during the quarter.

Cash Used in Operating Activities

Cash used in operating activities during the three months ended December 31, 2013 was $611,921, compared to cash used in operating activities during the three months ended December 31, 2012 of $133,022 (an increase of $478,899). The increase was primarily due to an increase in general and administrative expense attributable to increased costs associated with legal and accounting fees incurred in connection with being a public reporting entity and research and development expense in connection with activities to develop our primary product candidate.

Cash used in operating activities during the year ended September 30, 2013 was $1,434,620, compared to cash used in operating activities during the year ended September 30, 2012 of $254,636 (an increase of $1,179,984). The increase was primarily due to an increase in general and administrative expense attributable to increased costs associated with legal and accounting fees incurred in connection with the Merger and repayment of accrued interest on notes payable to our Chief Executive Officer, partially offset by a decrease in patent prosecution costs

Cash Used in Investing Activities

There was no cash used in investing activities during the three months ended December 31, 2013 or 2012, or during the years ended September 30, 2013 or 2012.

Cash Provided by Financing Activities

Cash provided by financing activities during the three months ended December 31, 2013 was $1,000,000 compared to cash provided by financing activities during the three months ended December 31, 2012 of $125,000 (an increase of $875,000). The increase in cash provided by financing activities was a result of increased financing from the MLSC Loan of $1,000,000 during the three months ended December 31, 2013 as compared to convertible notes of $125,000 from issuance of convertible notes to existing investors during the three months ended December 31, 2012.

Cash provided by financing activities during the year ended September 30, 2013 was $1,974,800, compared to cash provided by financing activities during the year ended September 30, 2012 of $235,000 (an increase of $1,739,800). The increase in cash provided by financing activities was obtained from issuances of convertible promissory notes, which were exchanged for equity upon the closing of the Merger, and amounts received in the Coldstream Financing, reduced by the repayment of certain notes payable to our Chief Executive Officer.

Sources of Capital

Prior to the closing of the Merger, we had primarily funded our operations through the issuance of convertible debt and other promissory notes and related warrants, from which we received an aggregate of $1,985,000 in exchange for such issuances from inception through the closing of the Merger on June 26, 2013. All of such convertible notes and related warrants were cancelled in exchange for shares of our common stock in connection with the closing of the Merger. Subsequent to the Merger, we have funded our operations through the issuance and sale of shares of our common stock and warrants to acquire shares of our common stock for a total of $4,850,000 including the Private Placement Financing entered into on January 30, 2014 and $1,000,000 of indebtedness under the MLSC Loan Agreement. We have no contractual commitments for any further funding from those or any other parties.

We will not receive proceeds from the sale of common stock under this prospectus. However, we would receive approximately $11,970,000 from the selling securityholders if they exercise their Warrants in full on a cash basis (assuming no adjustments are made to the exercise price or number of shares issuable upon exercise of such Warrants), which we expect we would use primarily for working capital purposes. We also expect we may use a portion of any such proceeds we may receive to satisfy our indebtedness to MLSC. Pursuant to the MLSC Loan Agreement, we must repay $1 million plus accrued interest on the earlier of (a) the receipt by us of aggregate net proceeds of more than $5,000,000 from one or more financing transactions in which we receive net proceeds of $5,000,000 or more in a 12-month period, or (b) September 30, 2018. The Warrant holders may exercise their Warrants at any time in accordance with the terms thereof until their expiration. Additionally, if there is no effective registration statement registering the resale of the shares of common stock underlying the Warrants as of certain time periods (as provided in the Warrants), the Warrant holders may choose to exercise their Warrants on a “cashless exercise” or “net exercise” basis. If they do so, we will not receive any proceeds from the exercise of the Warrants. Because the Warrant holders may exercise the Warrants at their own discretion, if at all, we cannot plan on receiving any proceeds from the exercise thereof, nor can we plan on any specific uses of any proceeds we may receive beyond the purposes described herein.

Cash Requirements

As described above, we anticipate that our operating and other expenses will increase as we continue to implement our business plan and pursue our operational goals. We estimate that our aggregate operating expenses and working capital requirements for our fiscal year ending September 30, 2014 will be approximately $3,600,000 (inclusive of the three months ended December 31, 2013). After giving effect to the funds received in our recent equity financings, including the Private Placement Financing closed on February 4, 2014, and debt financings, including the MLSC Loan Agreement entered into on September 30, 2013, we estimate we have sufficient funds to operate the business through October 2014. We will require additional financing to fund our planned future operations, including the continuation of our ongoing research and development efforts, seeking to license or acquire new assets, and researching and developing any potential patents, the related compounds and any further intellectual property that we may acquire. In addition, our estimates of the amount of cash necessary to operate our business may prove to be wrong, and we could spend our available financial resources much faster than we currently expect. Further, our estimates regarding our use of cash could change if we encounter unanticipated difficulties, in which case our current funds may not be sufficient to operate our business for the period we expect.

We do not have any commitments for future capital (including any future capital we could receive upon the exercise of the Warrants, if any). Significant additional financing will be required to fund our planned operations in the near term and in future periods, including research and development activities relating to our principal product candidate, seeking regulatory approval of that or any other product candidate we may choose to develop, commercializing any product candidate for which we are able to obtain regulatory approval or certification, seeking to license or acquire new assets or businesses, and maintaining our intellectual property rights and pursuing rights to new technologies. We do not presently have, nor do we expect in the near future to have, revenue to fund our business from our operations, and will need to obtain all of our necessary funding from external sources for the foreseeable future. We may not be able to obtain additional financing on commercially reasonable or acceptable terms when needed, or at all. We are bound by certain terms and obligations that may limit or otherwise impact our ability to raise additional funding in the

near-term, including restrictive covenants in the MLSC Loan Agreement that limit our ability to incur certain types of additional indebtedness and certain terms of the Private Placement Financing that prohibit or limit us from effecting certain types of equity financings for specified periods of time or impose anti-dilution provisions that may make cause dilution to the ownership interests of our current stockholders in the event of some equity financings. These restrictions and provisions could make it more challenging for us to raise capital through the incurrence of debt or through equity issuances. If we cannot raise the money that we need in order to continue to develop our business, we will be forced to delay, scale back or eliminate some or all of our proposed operations. If any of these were to occur, there is a substantial risk that our business would fail and our stockholders could lose all of their investments.

Since inception, we have funded our operations primarily through equity and debt financings and we expect to continue to seek to do so in the future. If we obtain additional financing by issuing equity securities, our existing stockholders' ownership will be diluted, which dilution could be increased if certain anti-dilution protections provided to the holders of the Warrants are triggered by any such equity issuance. Additionally, the terms of securities we may issue in future capital-raising transactions may be more favorable for our new investors. Further, newly issued securities may include preferences, superior voting rights and the issuance of warrants or other derivative securities, which may have additional dilutive effects. If we obtain additional financing by incurring debt, we may become subject to significant limitations and restrictions on our operations pursuant to the terms of any loan or credit agreement governing the debt, which would be in addition to those currently imposed by the MLSC Loan Agreement. Further, obtaining any loan, assuming a loan would be available when needed on acceptable terms, would increase our liabilities and future cash commitments. We may also seek funding from collaboration or licensing arrangements in the future, which may require that we relinquish potentially valuable rights to our product candidates or proprietary technologies or grant licenses on terms that are not favorable to us. Moreover, regardless of the manner in which we seek to raise capital, we may incur substantial costs in those pursuits, including investment banking fees, legal fees, accounting fees, printing and distribution expenses and other related costs.

Going Concern

From inception through December 31, 2013, we have not earned operating revenues from sales of products or services, and have recurring losses from operations. As of December 31, 2013, we had incurred a net loss of $5,440,312 since our inception. The continuation of our business as a going concern is dependent upon raising additional capital and eventually attaining and maintaining profitable operations. As of December 31, 2013, there is substantial doubt about the Company's ability to continue as a going concern. The consolidated financial statements included in this prospectus do not include any adjustments that might be necessary should operations discontinue.

Critical Accounting Policies and Significant Judgments and Estimates

Pursuant to certain disclosure guidance issued by the SEC, the SEC defines "critical accounting policies" as those that require the application of management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. Our critical accounting policies that we anticipate will require the application of our most difficult, subjective or complex judgments are as follows:

Basis of Presentation — Development Stage Company

We have not earned any revenue from operations. Accordingly, our activities have been accounted for as those of a "Development Stage Company" as set forth in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 915. Among the changes in disclosures required by ASC 915 are that our consolidated financial statements be identified as those of a development stage company, and that the consolidated statements of operations, changes in stockholders' equity (deficit) and cash flows disclose activity since the date of our inception.

Use of Estimates

Management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates.

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment when circumstances indicate the carrying value of an asset may not be recoverable in accordance with ASC 360, Property, Plant and Equipment. For assets that are to be held and used, impairment is recognized when the estimated undiscounted cash flows associated with the asset or group of assets is less than their carrying value. If impairment exists, an adjustment is made to write the asset down to its fair value, and a loss is recorded as the difference between the carrying value and fair value. Fair values are determined based on quoted market values, discounted cash flows or internal and external appraisals, as applicable. Assets to be disposed of are carried at the lower of carrying value or estimated net realizable value.

Convertible Debt

The Company records a discount to convertible notes for the intrinsic value of conversion options embedded in debt instruments based upon the differences between the fair value of the underlying preferred stock at the commitment date of the note transaction and the effective conversion price embedded in the note. Debt discounts under these arrangements are amortized to noncash interest expense using the effective interest rate method over the term of the related debt to their date of maturity. If a security or instrument becomes convertible only upon the occurrence of a future event outside the control of the Company, or, is convertible from inception, but contains conversion terms that change upon the occurrence of a future event, then any contingent beneficial conversion feature is measured and recognized when the triggering event occurs and contingency has been resolved.

Revenue

The Company recognizes revenue in accordance with ASC 605-28, the milestone method of revenue recognition for arrangements involving research or development or other performance obligations whereby a portion or all of the consideration is contingent upon achievement of milestone events. Under these provisions, arrangement consideration contingent upon achievement of a milestone is recognized by the Company in the period the milestone is met when the Company concludes that the milestone is substantive. Upon inception of each applicable arrangement, the Company assesses each milestone and the consideration payable upon achievement of each milestone and concludes that the milestone is substantive if all of the following criteria are met: (i) the consideration is commensurate with the Company's performance or the enhanced value of a delivered item which is a direct result of the Company's performance to achieve the milestone, (ii) the consideration relates to past performance and there are no refund rights or other penalties related to the consideration based on completion of future performance and (iii) the consideration is reasonable relative to all the deliverables and payment terms within the arrangement. The related consideration for milestones that are considered substantive is recognized in its entirety in the period which the milestone is met. For the period from inception (March 6, 2006) through September 30, 2013 the Company has not recorded any revenue for these types of activities.

Research and Development

The Company expenses internal and external research and development costs, including costs of funded research and development arrangements, in the period incurred. Research and development related income is recognized over the term of the related project under the proportional performance method based on costs incurred.

Accounting for Stock-Based Compensation

The Company accounts for employee stock-based compensation in accordance with the guidance of FASB ASC Topic 718, Compensation-Stock Compensation, which requires all share- based payments to employees, including grants of employee stock options, to be recognized in the consolidated financial statements based on their fair values. The Company accounts for non-employee stock-based compensation in accordance with the guidance of FASB ASC Topic 505, Equity ("FASB ASC Topic 505"), which requires that companies recognize compensation expense based on the estimated fair value of options granted to non-employees over their vesting period, which is generally the period during which services are rendered by such non-employees. FASB ASC Topic 505 requires the Company to re-measure the fair value of stock options issued to non- employee at each reporting period during the vesting period or until services are complete.

In accordance with FASB ASC Topic 718, Compensation-Stock Compensation, the Company has elected to use the Black-Scholes option pricing model to determine the fair value of options granted and recognizes the compensation cost of share-based awards on a straight-line basis over the vesting period of the award.

The determination of the fair value of share-based payment awards utilizing the Black-Scholes model is affected by the fair value of the common stock and a number of other assumptions, including expected volatility, expected life, risk-free interest rate and expected dividends. The Company does not have a history of market prices of the common stock, and as such volatility is estimated in accordance with ASC 718-10-S99 Compensation-Stock Compensation, using historical volatilities of similar public entities. The life term for awards and, therefore, uses simplified method for all “plain vanilla” options, as defined in SAB No. 107 and the contractual term for all other employee and non-employee awards. The risk-free interest rate assumption is based on observed interest rates appropriate for the terms of our awards. The dividend yield assumption is based on history and the expectation of paying no dividends. Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Stock-based compensation expense, when recognized in the consolidated financial statements, is based on awards that are ultimately expected to vest.

Fair Value Measurements

The Company measures both financial and nonfinancial assets and liabilities in accordance with FASB ASC Topic 820, Fair Value Measurements and Disclosures, except those that are recognized or disclosed in the consolidated financial statements at fair value on a recurring basis. The standard created a fair value hierarchy which prioritizes the inputs to valuation techniques used to measure fair value into three broad levels as follows: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities; Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly; and Level 3 inputs are unobservable inputs that reflect the Company’s own assumptions about the assumptions market participants would use in pricing the asset or liability.

The Company’s financial instruments include cash and cash equivalents. Because of their short maturity, the carrying amount of cash and cash equivalents are considered to approximate fair value.

Income Taxes

In accordance with FASB ASC 740, Income Taxes, we recognize deferred tax assets and liabilities for the expected future tax consequences or events that have been included in our consolidated financial statements and/or tax returns. Deferred tax assets and liabilities are based upon the differences between the financial statement carrying amounts and the tax bases of existing assets and liabilities and for loss and credit carryforwards using enacted tax rates expected to be in effect in the years in which the differences are expected to reverse. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized.

We provide reserves for potential payments of tax to various tax authorities related to uncertain tax positions when management determines that it is probable that a loss will be incurred related to these matters and the amount of the loss is reasonably determinable. We have no reserves related to uncertain tax positions as of September 30, 2013 and September 30, 2012.

Recent Accounting Guidance

Accounting Standards Update (ASU) 2013-11, “Income Taxes (Topic 740) - Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists” (the “Update”) was issued in July 2013. The amendments in this Update are effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. Early adoption is permitted. The amendments should be applied prospectively to all unrecognized tax benefits that exist at the effective date. Retrospective application is permitted. The adoption of this ASU has not had a material impact on the Company’s consolidated financial statements.

Off-Balance Sheet Arrangements

We have no significant 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 stockholders.

our BUSINESS

The following discussion should be read in conjunction with our consolidated financial statements and the related notes and other financial information included in this prospectus.

Corporate Overview

We were incorporated under the laws of State of Nevada on September 16, 2009 as Almah, Inc. On May 10, 2013, we entered into an Agreement and Plan of Merger (the "Merger Agreement") with Arch Biosurgery, Inc. ("ABS") and Arch Acquisition Corporation, our wholly owned subsidiary formed for the purpose of the transaction, pursuant to which Arch Acquisition Corporation merged with and into ABS and ABS thereby became our wholly owned subsidiary (the "Merger"). The Merger closed on June 26, 2013. In contemplation of the Merger, effective May 24, 2013, we effected a forward stock split, by way of a stock dividend, of our issued and outstanding shares of common stock at a ratio of 11 shares to each one issued and outstanding share, and effective June 5, 2013, we changed our name from Almah, Inc. to Arch Therapeutics, Inc.

ABS was incorporated under the laws of the Commonwealth of Massachusetts on March 6, 2006 as Clear Nano Solutions, Inc. On April 7, 2008, ABS changed its name to Arch Therapeutics, Inc., and on June 26, 2013, ABS changed its name from Arch Therapeutics, Inc. to Arch Biosurgery, Inc.

Prior to the completion of the Merger, the Company was a "shell company" under applicable rules of the SEC, and had no or nominal assets or operations. Upon the closing of the Merger, we abandoned our prior business plan and are pursuing a business as a life science medical device company as our sole business.

Our Business

We are a life science medical device company in the development stage with limited operations to date. We aim to develop products that make surgery and interventional care faster and safer by using a novel approach to stop bleeding (referenced as "hemostasis"), control leaking (referenced as "sealant"), and provide other advantages during surgery and trauma care. Our core technology is based on a self-assembling peptide that creates a physical, mechanical barrier, which could be applied to seal organs or wounds that are leaking blood and other fluids. We believe our technology could support an innovative platform of potential products in the field of stasis and barrier applications. Our lead product candidate, AC5 Surgical Hemostatic Device™, is designed to achieve hemostasis in minimally invasive and open surgical procedures, and we hope to develop other product candidates in the future based on our technology

platform aimed at stopping bleeding and sealing other leaking fluids during surgical and other procedures.

Our Core Technology

Our technology platform is based on self-assembling synthetic peptides. Our plan and business model is to develop products that apply that core technology for use with bodily fluids and tissues.

Our product candidate, AC5 Surgical Hemostatic Device, relies on this technology and is designed to achieve hemostasis during surgical procedures. We envision developing other product candidates in the future based on our core technology, examples of which could include, for instance, products for specialty surgery, burn and trauma care, wound care, military applications, and consumer care.

We have devoted much of our operations to date to the development of our core technology, including selecting our lead product composition, conducting initial safety and other related tests, generating scale-up, reproducibility and manufacturing methods, and developing and protecting the intellectual property rights underlying our technology platform. We have one key intellectual property licensor, the Massachusetts Institute of Technology (“MIT”), from which we license certain of our important intellectual property rights, and have made, and hope to continue to make, advances on our core technology to further refine and improve its use and functionality, further develop our intellectual property rights, and ultimately produce an expanded portfolio of potential product candidates.

AC5 Surgical Hemostatic Device

AC5 Surgical Hemostatic Device is designed to be a biocompatible synthetic peptide comprising naturally occurring amino acids. When applied to a wound, AC5 intercalates into the interstices of the connective tissue where it self-assembles into a physical, mechanical structure that provides a barrier to leaking substances, such as blood.

We believe that the results of early data from preclinical animal tests have shown quick and effective hemostasis with the use of AC5 relative to other types of hemostatic agents. AC5 is designed for direct application as either a liquid or a spray, which we believe will make it user-friendly and able to conform to irregular wound geometry. Additionally, AC5 is not sticky or glue-like, which we believe will enhance its utility in the setting of minimally invasive and laparoscopic surgeries. Further, AC5 is transparent, which should make it easier for surgeons or other healthcare providers to maintain a clear field of vision during a surgical procedure and prophylactically stop bleeding as it starts, which we call Crystal Clear Surgery™.

Completed Preclinical Development

We are in the early stages of our planned clinical program for AC5. We are focused on scale-up of selected manufacturing methods and formulation optimization. In parallel, we are conducting certain preclinical animal tests, while other planned preclinical animal tests will start after completion of the manufacturing scale-up and formulation optimization steps. We believe that peptide formulation optimization is particularly challenging, and any delays could negatively impact our anticipated clinical trial and subsequent commercialization timeline. In order to achieve the approvals and certifications we will need to market and sell AC5, significant additional testing, including conducting human clinical trials, will be required. A significant portion of the early preclinical animal experimentation conducted on our technology was performed by a co-founding inventor of certain of our technology, Dr. Rutledge Ellis-Behnke. Some of the significant findings from Dr. Ellis-Behnke's studies have been published. Additionally, through collaboration with the National University of Ireland system, preclinical animal and tissue experiments have been performed in Dublin and Cork, Ireland. We have also engaged, on a fee for service basis, private third party facilities in the United States to perform certain preclinical animal studies, which are sometimes conducted with assistance from our scientific team, and we continue to engage third parties for such services as needed and as appropriate.

In the preclinical animal tests conducted to date, AC5 has demonstrated improved average time to hemostasis ("TTH") when applied to animal brains, spinal cords and livers. Those studies have tested TTH when using AC5 during a range of surgical procedures compared to TTH when using a control substance, a saline control substance, a control peptide, and a cautery control substance during those same procedures. The results of those tests have shown a TTH of under 15 seconds when AC5 was applied, compared to a TTH ranging from 80 to 300 seconds when various control substances were applied, depending on the nature of the control substance and procedure performed. In tests to date, AC5 has also demonstrated biocompatibility and normal healing of tissue treated with the product. Further, animals whose liver, spleen, femoral artery, eye or brain was treated with AC5 have shown no ill-effects. We believe that the

peptide degrades into the naturally occurring amino acids from which it was originally synthesized, which are molecules that already exist in large quantities in the human body.

Formulation optimization is an important part of peptide development. AC5 formulation optimization, which is done with extensive collaboration among our team and partners, is focused on optimizing product parameters to target specifications covering performance, physical appearance, stability, handling and other characteristics. We intend to monitor formulation optimization closely, as success or failure in both setting and realizing appropriate specifications may directly impact the success and timelines of our anticipated preclinical testing, clinical testing and subsequent commercialization.

Our current and planned near-term activities are focused on manufacturing scale-up, formulation optimization, and preclinical activities, as well as preparing for future clinical trials for AC5.

Development and Commercialization Strategy

Our present business model is to operate with a relatively small internal team of key personnel and engage third party service providers to conduct larger scale research, development and manufacturing activities. Our internal team collectively has a broad range of expertise and experience working with and managing third party vendors. This general approach enables us to utilize the services of third party entities that are experts in different aspects of our operations, while preserving capital and efficiencies by avoiding certain internal scale-up costs and duplication of resources.

Research and Development; Manufacturing

Use of Third Party Relationships

To date, we have engaged third party laboratory facilities run by experts in Europe and the U.S. to perform preclinical research and development activities. Those engagements have assisted in our development of our primary product candidate, as well as our generation of appropriate analytical methods, scale-up, and other procedures that we intend to use as a "blueprint" for a third party manufacturer to produce the product on a larger scale for purposes of further preclinical and clinical testing and ultimately, if required approvals are obtained, commercialization.

We have initiated the transition to traditional contract manufacturing and related organizations. We have commenced relationships with manufacturers operating with the cGMP required by applicable regulatory agencies, in order to scale up and produce clinical formulation material to be used for final preclinical testing and clinical trials.

Manufacturing Methods

We believe that the manufacturing methods used for a product, including the type and source of ingredients and the burden of waste byproduct elimination, are important determinants of its opportunity for profitability. Industry is keenly aware of the downsides of technologies that rely on expensive biotechnology techniques and facilities for manufacture, onerous and expensive programs to eliminate complex materials, or ingredients that are sourced from the complicated process of human or other animal plasma separation, since those products typically are expensive, burdensome to produce, and at greater risk for failing regulatory oversight.

The manufacturing methods that we envision using to produce AC5 and other potential future product candidates rely on synthetic organic chemistry. Although use of those methods will likely require that we engage a manufacturer that can employ certain expertise with the technology, skill and know-how involved with those methods, the required manufacturing equipment to use those methods is widely available. Furthermore, improvements in relevant synthetic manufacturing techniques in the past several years have reduced their complexity and cost, while increasing large scale cGMP capacity. In addition, as a result of increased demand for amino acids over the past decade, the cost of obtaining amino acid raw materials has decreased. Moreover, our planned product candidates, including AC5, will be synthesized of naturally occurring ingredients that are not sourced from humans or other animals, but do exist in humans in their natural state. That type of ingredient may be more likely to be categorized as "generally recognized as safe", or "GRAS", by the FDA, and may convey a lower risk of adverse effects.

We believe that our pursued manufacturing methods and ingredients will make our choice of third party manufacturers important, as we will need to select service providers possessing sufficient expertise in synthetic organic chemistry manufacturing, but that the relative lack of expensive equipment, technology and materials required and the naturally occurring ingredients used in the manufacturing process will provide a benefit.

Regulatory

Medical Device Classification

Although the FDA and other regulatory authorities or related bodies will finally determine the classification of AC5, we believe that our primary product candidate meets the criteria for a medical device. Generally, a product is a medical device if it requires neither metabolic nor chemical activity to achieve the desired effect. Furthermore, generally a medical device can achieve its desired effects without requiring a body (animal/human), whereas a drug or a biologic requires a body in order to operate. The AC5 mechanism of assembly into a barrier can occur outside of a body and is consistent with the medical device definition.

Medical devices in the European Union ("EU") and the U.S. are classified along a spectrum. We anticipate that AC5 will be a Class III medical device in these jurisdictions, subject to the process for obtaining a CE mark in the EU and the premarketing authorization process in the U.S. While the Class III status is a higher-level classification than for devices not comprised of novel materials and involves additional procedure and regulatory scrutiny of the product candidate to obtain approvals, it provides less regulatory ambiguity.

Biocompatibility Tests and Clinical Trials

Before initiating any human clinical trials, we will need to assess the biocompatibility of AC5. Standard required tests to assess biocompatibility, as set forth in ISO 10993 issued by the International Organization for Standardization, include:

- in vitro cytotoxicity;
- in vitro blood compatibility;
- in vitro Ames assay (mutagenic activity);
- irritation/intracutaneous reactivity;
- sensitization (allergenic reaction);
- implantation (performed on devices that contact the body's interior);
- pyrogenicity (causing fever or inflammation);
- systemic toxicity; and
- in vitro chromosome aberration assay (structural chromosome changes).

We have not commenced formal biocompatibility studies for AC5. However, Dr. Ellis-Behnke and his colleagues previously engaged a third party to perform certain in vitro and in vivo biocompatibility and toxicology studies on an earlier version of the composition of AC5, and such tests illustrated no evidence of toxicity. Further, certain large relative dose pilot tests have been performed in rodents, and no abnormal behavior or pathology has been observed from such tests. The results of those tests may not be indicative of the results that may be obtained from any biocompatibility studies of AC5 that we aim to pursue in the near term.

Following completion of biocompatibility tests for AC5, assuming successful results of those tests, we expect that we will focus on conducting human clinical trials. Upon completion of required clinical trials and assuming successful results, we expect that we will then pursue a CE mark, the required European approval to market and commercialize a medical device such as AC5, prior to pursuing approval by the U.S. FDA.

We expect that we will pursue approvals for use of AC5 as a hemostatic agent in surgical settings, and we may also seek to obtain approvals for additional potential indications for use of the product, which we may pursue either opportunistically or once initial regulatory approval for the product is obtained.

Commercialization

We are in the process of developing a long-term commercialization plan for our product candidates. That plan could entail entering into one or more strategic partnerships in connection with product commercialization, our direct performance of commercialization activities, or some combination of those alternatives. Based on our current general approach and strategy of utilizing the expertise and resources of third party service providers and maintaining a small internal team, we currently expect that we may pursue some degree of strategic collaborations or partnerships with third parties, which could include licensing arrangements, distribution and supply partnerships, engagement of external regulatory experts and/or marketing and sales teams, among other types of potential relationships. We presently believe that certain partnerships or collaboration relationships could improve our ability to obtain regulatory approval for our product candidates and attain market acceptance for and profitable sales of those product candidates, and that our current and planned activities and milestones relating to AC5 are well-aligned with the needs of the market and potential partners and collaborators that may wish to enter or expand their presence in our target markets.

We envision the potential future customers in the marketplace for AC5 and any other hemostatic or sealant agent we may pursue will include surgeons and other doctors, government agencies such as the Department of Defense, hospital and operating room management and ambulance and other trauma specialists.

Plan of Operations

Our long-term business plan includes the following goals:

- conducting successful biocompatibility studies and, subsequently, clinical trials on AC5;
- obtaining regulatory approval or certification of AC5 in the EU, the U.S., and/or other jurisdictions as we may determine;
- expanding our intellectual property portfolio;
- developing appropriate third party relationships to manufacture, distribute, market and otherwise commercialize AC5; and
- developing additional product candidates in the hemostatic and sealant field.

With respect to our goals relating to AC5, we currently project requiring at least $6,000,000 of additional capital to complete the milestones to obtain regulatory approval in Europe. We expect that obtaining regulatory approvals in the U.S., including conducting additional required clinical trials, would require at least an additional $9,000,000 in capital. These estimated amounts could increase by potentially large amounts if any number of risks relating to conducting these activities were to occur, including without limitation those set forth under the heading "Risk Factors" in this prospectus.

In furtherance of our long-term business goals, we expect to focus on the following activities during the next twelve months:

- expand our team during the second calendar quarter by hiring a Vice President of Research and Development Engineering, adding additional quality systems expertise, and hiring a full time Chief Financial Officer in order to meet the Company's growing needs, which we anticipate will require approximately $400,000 for salary and related expenses during calendar year 2014;

- expand and enhance our intellectual property portfolio by filing new patent applications, obtaining allowances on currently filed patent applications, and adding to our trade secrets in self-assembly, manufacturing, analytical methods and formulation, which activities will be ongoing as we seek to expand our product candidate portfolio and which we anticipate will require approximately $250,000 during calendar year 2014;

- select a large scale manufacturing partner for scale-up and initiate production of product compliant with current good manufacturing practices ("cGMP"), which we anticipate will start in the third calendar quarter of 2014 and will require approximately $750,000 during the next twelve months;

- select a Notified Body for European regulatory pathway, confirm CE mark pathway plan for Europe, and participate in related regulatory meetings, which activities we anticipate will start during the second calendar quarter of 2014, continue throughout the balance of the year, and require approximately $200,000 during calendar year 2014. For a description of the CE mark pathway and European Notified Bodies, see "–Regulation by the FDA and Similar Foreign Agencies–Pre-Marketing Regulation in the EU";

- identify and select additional pipeline candidates from self-assembling peptide platform for advancement into development, which activities will be ongoing as we seek to expand our product candidate portfolio and which we anticipate will require approximately $200,000 during calendar year 2014;

- conduct both informal and formal biocompatibility studies during the second and third calendar quarters of 2014, which we anticipate will require approximately $250,000 during calendar year 2014;

- develop initial clinical trial protocols, complete Clinical Investigational Plan with key opinion leaders and principal investigators and submit application to Ethics Committee, which activities we anticipate will occur during the second half of 2014 and require approximately $300,000 during calendar year 2014;

- commence a human clinical trial, the timeframe for which is dependent upon successful completion of certain manufacturing, regulatory, and biocompatibility activities. Based on current expectations, we estimate such a trial could be commenced as early as the fourth calendar quarter of 2014. We anticipate these activities will require approximately $1,000,000 over the course of the trial; and

- seek to raise additional funding when and as needed to support the milestones described above and our operations generally. The anticipated costs of our activities described above totals approximately $3.35 million over the next 12 months. The net proceeds to us of the Private Placement Financing, which totaled approximately $2.68 million, are being used, and are expected to continue to be used, to fund these activities. We will need to raise additional funds in the near term in order to support our business and the operational activities described above.

We anticipate that our operating and other expenses will continue to increase as we continue to implement our business plan and pursue these goals. After giving effect to the funds received in the recent equity and debt financings and assuming our use of that funding at the rate we presently anticipate, as of the date of this prospectus we expect to have sufficient funds to operate our business through October 2014. We could spend our financial resources much faster than we expect, in which case our current funds may not be sufficient to operate our business for that period.

Our estimates of the amount of cash necessary to operate our business and attain our near-term and long-term business goals may prove to be wrong, due to increased costs to achieve milestones and/or additional expenses if we encounter unanticipated difficulties or other reasons, in which case additional funding than projected would be needed. We have no commitments for any future capital (including any future capital we could receive upon the exercise of the Warrants, if any). We will require significant additional financing to fund our planned operations, including further research and development relating to our primary product candidate, seeking regulatory approval of that or any other product candidate we may choose to develop, commercializing any product candidate for which we are able to obtain regulatory approval or certification, seeking to license or acquire new assets or business, and maintaining our intellectual property rights and pursuing rights to new technologies. We do not presently have, nor do we expect in the near future to have, revenue to fund our business from operations, and we will need to obtain all of our necessary funding from external sources for the foreseeable future. We may not be able to obtain additional financing on commercially reasonable or acceptable terms when needed, or at all. If we cannot raise the money that we need in order to continue to develop our business, we will be forced to delay, scale back or eliminate some or all of our proposed operations. If any of these were to occur, there is a substantial risk that our business would fail and our stockholders could lose all of their investment.

Since inception, we have funded our operations primarily through equity and debt financings and we expect to continue to seek to do so in the future. If we obtain additional financing by issuing equity securities, our existing stockholders' ownership will be diluted, which dilution could be increased if certain anti-dilution protections provided to the holders of the Warrants are triggered by any such equity issuance. Additionally, the terms of securities we may issue in future capital-raising transactions may be more favorable for our new investors. Further, newly issued securities may include preferences, superior voting rights and the issuance of warrants or other derivative securities, which may have additional dilutive effects. If we obtain additional financing by incurring debt, we may become subject to significant limitations and restrictions on our operations pursuant to the terms of any loan or credit agreement governing the debt, which would be in addition to those currently imposed by the MLSC Loan Agreement. Further, obtaining any loan, assuming a loan would be available when needed on acceptable terms, would increase our liabilities and future cash commitments. We may also seek funding from collaboration or licensing arrangements in the future, which may require that we relinquish potentially valuable rights to our product candidates or proprietary technologies or grant licenses on terms that are not favorable to us. Moreover, regardless of the manner in which we seek to raise capital, we may incur substantial costs in those pursuits, including investment banking fees, legal fees, accounting fees, printing and distribution expenses and other related costs.

Industry

According to a 2012 report produced by MedMarket Diligence, LLC, approximately 114 million surgical and procedure-based wounds occur annually worldwide, including 36 million from surgery in the U.S. We estimate that 20-25% of those surgeries are performed using minimally invasive procedures. Additionally, some minor procedures and operations may not be included in those figures. We believe that the performance and safety of those surgeries and other procedures could benefit from sealants and hemostatic agents, because surgical and trauma patients are at significant risk for morbidity and mortality from bleeding and/or leaking body fluid.

Additional trends that support a demand for hemostatic and sealant products include the following:

- overall procedure volume growth;
- ambulatory same day surgery volume growth of approximately 5%;
- laparoscopic procedure volume growth; and
- efforts to reduce operating room time.

As a result of this demand, use of hemostatic agents and sealants is increasing. According to MedMarket Diligence, the market for these products achieved approximately $3.4 billion in 2010 worldwide sales and is projected to have reached $4.5 billion in 2013 and surpass $6.5 billion in 2017. Over two-thirds of those sales are for hemostatic agents. Further, the projected growth rate for sealants may be even higher than that for hemostatic agents due to a general lack of available products and potentially larger unmet need.

In spite of the large size of the market for these products, many available hemostatic and sealant agents possess a combination of limitations, including slow onset of action, general unreliability, user-unfriendliness, and risk for adverse effects, such as healing problems, adhesion formation, infection and other safety concerns. Many of the deficiencies of currently available hemostatic and sealant agents are the same as those of their first-generation counterparts, as revolutionary advances in underlying technologies have been elusive.

In the course of developing AC5, we engaged commercial strategy and marketing consultants to understand the routines and needs of potential customers and to assess market preferences. As we expected, better efficacy and reliability were identified as important to those customers, and we also discovered that other product features are also critical to achieving broad market acceptance. Surgeons, operating room managers, sales representatives for currently available hemostatic products, and hospital administrator decision-makers identified the following characteristics as desirable features of a hemostatic agent, which we carefully considered in developing AC5 and which we believe will be well satisfied by our primary product candidate:

· fast onset of activity;
· laparoscopic friendly;
· easily handled and applied;
· promotes a clear field of vision and does not obstruct view;
· non-viscous and flowable;
· non-sticky (to tissue or equipment);
· enables normal healing;

- indifferent to status of coagulation cascade or "blood thinning" drugs;
- non-toxic; and
- does not contain human blood product or animal components.

We have designed AC5 with the intent of meeting these market demands, and we anticipate it will be used in minimally invasive or laparoscopic surgery as well as open surgery. While open surgery represents the more established market for hemostatic agents, up to one-quarter of surgeries are performed by minimally invasive techniques, including laparoscopic surgery, and that number has been growing. Less invasive laparoscopic procedures produce shorter recovery times, faster discharges, less scarring, and less need for pain medications. Many of the hemostasis products currently available do not possess certain features and handling characteristics required for use in a laparoscopic setting. For instance, many available products may be challenging to use laparoscopically because they tend to be sticky, powdery, fabric-based or are otherwise difficult to control and/or insert into the small tubes used during many laparoscopic procedures. We believe that the novel features and differentiating characteristics of AC5 will make it more suitable for laparoscopic surgeries than presently available alternatives.

Further, available data indicates that there may be increased pressure to perform more complex surgeries at reduced costs, including conducting operations in less expensive outpatient settings. A National Health Statistics Report from 2006, revised in 2009, indicates that ambulatory surgery procedures have been increasing since the 1980’s due in part to an evolution of both medical technology and payment arrangements. In 2006, approximately 34.7 million outpatient surgical visits and 53.3 million total inpatient and outpatient surgical visits took place in the United States. Of the ambulatory surgical visits, 27.7% had two procedures performed. We believe that a motivating factor of these trends toward increasing outpatient surgeries may be the increased costs associated with hospital inpatient procedures performed in operating rooms, which, according to MedMarket Diligence, have been estimated to cost between $2,000 and $10,000 per hour. These costs likely motivate increased operating room throughput and increased volume of procedures performed in outpatient settings. Both of those trends highlight the need for highly effective hemostatic and sealant products that can decrease operating room time for inpatient procedures and help to increase the safety of performing more types of procedures in less expensive outpatient settings.

Competition

The hemostatic and sealant market is served by large established companies, such as Johnson & Johnson and its affiliated companies, Covidien plc, Baxter Healthcare Corporation, and The Medicines Company, as well as many smaller companies, academic institutions and governmental agencies and public and private research institutions. If AC5 obtains regulatory approval, we expect that we will compete against all of these companies and any others that have produced or are developing a hemostatic and sealant agent. Most of our competitors have substantially greater resources, capabilities and experience in the development, approval and commercialization of medical devices or other products than we do. We may not be able to compete successfully against these competitors for funding, personnel, CRO, manufacturing and other third party relationships and other operational resources, and our lead product candidate may not be able to compete successfully against our competitors’ hemostatic and sealant products.

We compete and our lead product candidate, if approved, will compete based on: product safety, efficacy and reliability; product features that promote ease of use (such as those described under the heading "—Industry" above); and product price. We believe that, assuming receipt of required regulatory approvals, AC5 will be well-positioned to compete against currently available products as a result of its broad applicability in various types of surgical settings and its features that address drawbacks seen in many available hemostatic agents, which appear to be mostly geared toward focused, niche applications and not broad surgical applications. For instance, a glue-like composition may be effective for sealing an air leak in the lung or connecting bleeding blood vessels, but it may not easily stop bleeding and permit normal healing in the liver. AC5 is envisioned as a general hemostatic agent that serves as one tool to replace narrower alternatives. Further, our planned use of a manufacturing method that we expect will be relatively simple and cost-effective compared to methods used to manufacture many currently available hemostatic products could enable any future sales to be made at competitive price points within the market range, which can cost between $50 and $500 per procedure, with the higher value added products generally priced at the upper end of that range. While our management believes that AC5, if approved, would compete favorably across these dimensions, our industry is characterized by rapid technological change that could result in new product introductions and other technological advancements that render our lead product candidate or any future product candidate we may seek to develop non-competitive or otherwise obsolete.

Some potential disadvantages of AC5 compared to the hemostatic agents currently on the market with which we would expect AC5 to compete if it obtains required regulatory approvals are as follows:

- The favorable handling characteristics of AC5 are the result of its non-sticky and non-glue-like nature. However, if a surgeon or healthcare provider requires a product to adhere tissues together, or provide similar glue-like action, then AC5 in its current form would not achieve that effect.

- While we project that AC5 will be relatively economical to manufacture at scale, it will not be able to compete from a price perspective with inexpensive means to stop bleeding, such as application of pressure or use of bandages or other inexpensive products.

- We have not completed preclinical and clinical human trials relating to AC5, whereas marketed competition has done so. Accordingly, the safety and efficacy of AC5 has not been demonstrated or accepted by required regulatory agencies, and we will require significant resources in order to conduct the required trials and other tests to attempt to obtain such approvals.

Research and Development Expenditures

Our research and development expenses to date have primarily included costs to develop our core technology and AC5. During the year ended September 30, 2013, we incurred $218,901 on research and development expenses, as compared to $87,021 incurred during the year ended September 30, 2012. We expect our research and development activities and expenses to increase significantly as we execute on our business plan and pursue clinical trials.

Regulation by the FDA and Similar Foreign Agencies

Our research, development and clinical programs, as well as our manufacturing and marketing operations that may be performed by us or third party service providers on our behalf, are subject to extensive regulation in the U.S. and other countries. Most notably, we believe that AC5 will be subject to regulation as a medical device under the U.S. Food Drug and Cosmetic Act as implemented and enforced by the FDA and equivalent regulations enforced by foreign agencies in any other countries in which we desire to pursue commercialization. The FDA and its foreign counterparts generally govern the following activities that we do or will perform or that will be performed on our behalf, to ensure that products we may manufacture, promote and distribute domestically or export internationally are safe and effective for their intended uses:

- product design, preclinical and clinical development and manufacture;
- product premarket clearance and approval;
- product safety, testing, labeling and storage;
- record keeping procedures;
- product marketing, sales and distribution; and
-

post-marketing surveillance, complaint handling, medical device reporting, reporting of deaths, serious injuries or device malfunctions and repair or recall of products.

Pre-Marketing Regulation by the U.S. FDA

Medical Device Classification

As described above, we expect that AC5 will be classified as a medical device because its primary desired activity does not depend on metabolic or chemical activity in a body. The FDA classifies medical devices into one of the following three classes on the basis of the amount of risk associated with the medical device and the controls deemed necessary to reasonably ensure their safety and effectiveness:

- Class I, requiring general controls, including labeling, device listing, reporting and, for some products, adherence to good manufacturing practices through the FDA's quality system regulations and pre-market notification;
- Class II, requiring general controls and special controls, which may include performance standards and post-market surveillance; or
- Class III, requiring general controls and approval of a premarket approval application ("PMA"), which may include post-market approval conditions and post-market surveillance.

PMA Approval Process

A PMA must be submitted to the FDA if a device cannot be cleared through another approval process or is not otherwise exempt from the FDA's premarket clearance and approval requirements. A PMA is required for most Class III medical devices. A PMA must generally be supported by extensive data, including without limitation technical, preclinical, clinical trial, manufacturing and labeling data, to demonstrate to the FDA's satisfaction the safety and efficacy of the device for its intended use. During the review period, the FDA will typically request additional information or clarification of the information previously provided. Also, an advisory panel of experts from outside the FDA may be convened to review and evaluate the PMA and provide recommendations to the FDA as to the approvability of the device, although the FDA may or may not accept any such panel's recommendation. In addition, the FDA will generally conduct a pre-approval inspection of the manufacturing facility or facilities involved with producing the device to ensure compliance with the cGMP regulations. Upon approval of a PMA, the FDA may require that certain conditions of approval, such as conducting a post-market approval clinical trial, be met.

The PMA approval process can be lengthy and expensive and requires an applicant to demonstrate the safety and efficacy of the device based, in part, on data obtained from clinical trials. The PMA process is estimated to take from one to three years or longer, from the time the PMA application is submitted to the FDA until an approval is obtained.

Further, if post-approval modifications are made that affect the safety or efficacy of the device, including, for example, certain types of modifications to the device's indication for use, manufacturing process, labeling or design, then new PMAs or PMA supplements would be required. PMA supplements often require submission of the same type of information as a PMA, except that the supplement is typically limited to information needed to support the changes from the device covered by the original PMA and accordingly may not require as extensive clinical and other data.

We expect that we will need to obtain PMA approval in order to sell AC5 in the U.S., but the FDA will ultimately determine whether a PMA is the appropriate approval to be obtained. We have not submitted to the FDA any PMA covering AC5 or commenced the required clinical trials. If we are able to conduct successful preclinical studies and submit a PMA, the FDA may not grant PMA approval of AC5 for the desired indications of use, on a timely basis, or at all. Our inability to achieve regulatory approval for AC5 in the U.S., a large market for hemostatic products, would materially adversely affect our ability to grow our business.

Clinical Trials

Obtaining PMA approval requires the completion of human clinical trials that produce successful results demonstrating the safety and efficacy of the product. Clinical trials for a Class III medical device typically require an

application for an investigational device exemption, which would need to be approved in advance by the FDA for a specified number of patients and study sites. Human clinical trials are subject to extensive monitoring, recordkeeping and reporting requirements, and must be conducted under the oversight of an IRB for the relevant clinical trial sites and comply with applicable FDA regulations, including those relating to GCP.

Prior to conducting a clinical trial, we also would be required to enroll sufficient patients to conduct the trial and obtain each patient's informed consent in a form and substance that complies with both FDA requirements and state and federal privacy and human subject protection regulations. Many factors could lead to delays or inefficiencies in conducting clinical trials, some of which are discussed under the heading "Risk Factors" in this prospectus. Further, we, the FDA or the IRB could suspend a clinical trial at any time for various reasons, including a belief that the risks to the subjects of the trial outweigh the anticipated benefits. Even if a trial is completed, the results of clinical testing may not adequately demonstrate the safety and efficacy of the device or may otherwise not be sufficient to obtain FDA clearance or approval to market the product in the U.S.

We have not commenced any human clinical trials. We also have not yet commenced certain biocompatibility studies, described above under the heading "Development and Commercialization Strategy—Regulatory—Biocompatibility Tests and Clinical Trials", that are typically completed prior to commencing clinical trials. We will require significant additional funding and preparation before we are able to initiate the first clinical trial for AC5 and in order to complete all required trials to obtain marketing approval in the U.S.

Pre-Marketing Regulation in the EU

Medical Device Classification

Similar to the U.S., the EU recognizes different class of medical devices. The EU recognizes Class I, Class IIa, Class IIb or Class III medical devices. Medical devices in the EU are classified into one of those classes on the basis of the amount of potential risk to the patient associated with use of the medical device. Classification involves rules found in the EU's Medical Device Directive. Key questions of relevance include the degree of the device's contact with the patient, invasiveness, active nature, and indications for use. The medical device classes recognized in the EU are as follows:

- Class I, which are considered low risk devices, such as wheelchairs and stethoscopes, and require pre-market notification prior to placing the devices onto the EU market;
- Class IIa, which are considered low-medium risk devices and require certification by a Notified Body;
- Class IIb, which are considered medium-high risk devices and require certification by a Notified Body; and
- Class III, which are considered high-risk devices and require certification by a Notified Body.

We anticipate that AC5 would be classified as a Class III medical device based on the EU's medical device classes.

CE Mark Approval Process

The EU has adopted numerous directives and standards regulating the design, manufacture, clinical trials, labeling, and adverse event reporting for medical devices. Each EU member state has implemented legislation applying these directives and standards at a national level. Other countries outside of the EU have also voluntarily adopted laws and regulations that mirror those of the EU with respect to medical devices.

Under applicable EU medical device directives, a CE mark is a symbol placed on a product that declares the product's compliance with the essential requirements of applicable EU health, safety and environmental protection legislation. In order to receive a CE mark for a product candidate, the company producing the product candidate must select a country in which to apply. Each country in the EU has one competent authority ("CA") that implements the national regulations by interpreting the EU directives. The CA in each country also designates and regulates Notified Bodies, which are private commercial entities designated by the national government of a member state as being competent to make independent judgments about whether a device complies with applicable regulatory requirements. An assessment by a Notified Body in the selected country within the EU is required in order to commercially distribute the device. In addition, compliance with ISO 13485 issued by the International Organization for Standardization, among other standards, establishes the presumption of conformity with the essential requirements for CE marking. Certification to the ISO 13485 standard demonstrates the presence of a quality management system that can be used by a manufacturer for design and development, production, installation and servicing of medical devices and the design, development and provision of related services.

Devices that comply with the requirements of the laws of the selected member state applying the applicable EU directive are entitled to bear a CE mark and can be distributed throughout the member states of the EU, as well as in other countries that have mutual recognition agreements with the EU or have adopted the EU's regulatory standards.

We have identified several potential countries through which we may pursue a CE mark for AC5.

Clinical Trials

As with U.S. Class III medical device approval, EU Class III medical device approval requires the successful completion of human clinical trials. However, there are several key differences between the jurisdictions with respect to the approvals and processes. Obtaining a CE mark is not equivalent to obtaining FDA approval, in that a CE mark confirms the safety, but not the effectiveness, of a product. Furthermore, a CE mark affixed to a product serves as a declaration by the responsible party that the product conforms to applicable provisions and that relevant conformity assessment procedures have been completed with respect to the product. Accordingly, we anticipate that the required EU clinical trial(s) for AC5 will be smaller, faster, and less expensive than what we expect would be required for AC5 to obtain equivalent approvals in the U.S.

Post-Approval Regulation

After a medical device obtains approval from the applicable regulatory agency and is launched in the market, numerous post-approval regulatory requirements would apply. Many of those requirements are similar in the U.S. and in member states of the EU, and include:

- product listing and establishment registration;
- requirements that manufacturers, including third-party manufacturers, follow stringent design, testing, control, documentation and other quality assurance procedures during all aspects of the design and manufacturing process;
- labeling and other advertising regulations, including prohibitions against the promotion of products for uncleared, unapproved or off-label use or indication;

- approval of product modifications that affect the safety or effectiveness of any of our devices that may achieve approval;

- post-approval restrictions or conditions, including post-approval study commitments;
- post-market surveillance regulations, which apply, when necessary, to protect the public health or to provide additional safety and effectiveness data for the device;
- the recall authority of the applicable government agency and regulations pertaining to voluntary recalls; and
- reporting requirements, including reports of incidents in which a product may have caused or contributed to a death or serious injury or in which a product malfunctioned, and notices of corrections or removals.

Failure by us or by our third-party manufacturers and other suppliers to comply with applicable regulatory requirements could result in enforcement action by various regulatory authorities, which may result in monetary fines, the imposition of operating restrictions, product recalls, criminal prosecution or other sanctions.

Regulation by Other Foreign Agencies

International sales of medical devices are subject to government regulations in each country in which the device is marketed and sold, which vary substantially from country to country. The time required to obtain approval by a foreign country may be longer or shorter than that required for FDA or CE mark clearance or approval, and the requirements may substantially differ.

Other Governmental Regulations and Environmental Matters

We are or may become subject to various laws and regulations regarding laboratory practices and the use of animals in testing, as well as environmental laws and regulations governing, among other things, any use and disposal by us of hazardous or potentially hazardous substances in connection with our research. At this time, costs attributable to environmental compliance are not material. In each of these areas, applicable U.S. and foreign government agencies have broad regulatory and enforcement powers, including, among other things, the ability to levy fines and civil penalties, suspend or delay issuance of approvals, seize or recall products, and withdraw approvals, any one or more of which could have a material adverse effect on our business. Additionally, if we are able to successfully obtain approvals for and commercialize our product candidates, then we and our products may become subject to various federal, state and local laws targeting fraud, abuse, privacy and security in the healthcare industry.

Intellectual Property

We are focused on the development of self-assembling compositions, particularly self-assembling peptide compositions, and methods of making and using such compositions in medical and non-medical applications. Suitable applications of these compositions include limiting or preventing the movement of bodily fluids and contaminants within or on the human body, preventing adhesions, treatment of leaky or damaged tight junctions, and reinforcement of weak or damages vessels, such as aneurysms. Our strategy to date has been to develop an intellectual property portfolio in high-value jurisdictions that tend to uphold intellectual property rights.

We have filed 10 patent applications for self-assembling peptides and methods of use thereof in five jurisdictions, all of which are pending. We have also entered into a license agreement with MIT pursuant to which we have been granted exclusive rights under one portfolio of patents and non-exclusive rights under another portfolio of patents. The portfolio exclusively licensed from MIT includes more than 10 pending patent applications in 10 jurisdictions, of which four are allowed. The portfolio non-exclusively licensed from MIT includes 11 issued patents in eight jurisdictions that expire between 2016 and 2026 (absent patent term extension), and six pending patent applications in four jurisdictions.

Our license agreement with MIT imposes certain diligence, capital raising, and other obligations on us, including obligations to raise certain amounts of capital by specific dates. Additionally, we are responsible for all patent prosecution and maintenance fees under that agreement. Our breach of any material terms of our license agreement with MIT could permit the counterparty to terminate the agreement, which could result in our loss of some or all of our rights to use certain intellectual property that is material to our business and our lead product candidate. Our loss of any of the rights granted to us under our license agreement with MIT could materially harm our product development efforts and could cause our business to fail.

We also have been granted a non-exclusive sub-license of a patent assigned to MIT and in turn licensed by MIT to the sub-licensing third party, which patent is due to expire in 2014. The sub-license is a fully-paid and royalty-free and does not provide any outbound license grant to any ABS owned or exclusively licensed intellectual property. We presently do not anticipate any material impact on our business or operations resulting from the expected expiration of this patent in 2014.

We have pending trademark applications for AC5 Surgical Hemostatic Device™, AC5™, Crystal Clear Surgery™, NanoDrape™ and NanoBioBarrier™.

Employees

We presently have four full-time employees and three part-time employees, and make extensive use of third party contractors, consultants, and advisors to perform many of our present activities. We expect to increase the number of our employees as we increase our operations.

Properties

We do not own any real property. Between July 2013 and September 2013, we maintained our corporate offices at a property in Cambridge, Massachusetts that we leased under a month-to-month property rental agreement, pursuant to which we were obligated to pay monthly rent of approximately $2,800. In October 2013, we entered into a one and one-half year operating sublease agreement pursuant to which we lease the office space of our relocated headquarters in Wellesley, Massachusetts for a base annual rent equal to $5,031 per month. We believe our present offices are suitable for our current and planned near-term operations.

Legal Proceedings

In the ordinary course of business, we may become a party to legal proceedings involving various matters. We are unaware of any such legal proceedings presently pending to which we or our subsidiary is a party or of which any of our property is the subject that management deems to be, individually or in the aggregate, material to our financial condition or results of operations

DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Set forth below is certain information regarding our current directors and executive officers:

Name	Position	Age	Director/Officer Since
Dr. Avtar Dhillon	Chairman of the Board of Directors	53	April 2013
Dr. Arthur Rosenthal	Director	67	June 2013
Dr. Terrence W. Norchi	President, Chief Executive Officer and Director	49	April 2013
Alan T. Barber	Chief Financial Officer	60	June 2013
William M. Cotter	Chief Operating Officer	63	July 2013

Business Experience

The following is a brief account of the education and business experience of our current directors and executive officers during at least the past five years, indicating their principal occupation during the period, and the name and principal business of the organization by which they were employed:

Dr. Avtar Dhillon. Dr. Dhillon has served as the Chairman of our Board of Directors since April 2013 and has been on the Board of Directors of ABS since May 2011. Previously, Dr. Dhillon was the President and Chief Executive Officer of Inovio Pharmaceuticals, Inc. (formerly Inovio Biomedical Corporation) (NYSE Euronext: INO) from October 2001 to June 2009, and served as President and Chairman of Inovio from June 2009 until October 2009, as Executive Chairman until August 2011, and as Chairman from September 2011. During his tenure at Inovio, Dr. Dhillon led the successful turnaround of the company through a restructuring, acquisition of technology from several European and North American companies, and a merger with VGX Pharmaceuticals to develop a vertically integrated DNA vaccine development company with one of the strongest development pipelines in the industry. Dr. Dhillon led multiple successful financings for Inovio and concluded several licensing deals that included global pharmaceutical firms, Merck and Wyeth (now Pfizer). Prior to joining Inovio, Dr. Dhillon was vice president of MDS Capital Corp. (now Lumira Capital Corp.), one of North America's leading healthcare venture capital organizations. In July 1989, Dr. Dhillon started a medical clinic and subsequently practiced family medicine for over 12 years. Dr. Dhillon has been instrumental in successfully turning around struggling companies and influential as an active member in the biotech community. From March 1997 to July 1998, Dr. Dhillon was a consultant to Cardiome Pharma Corp. (NASDAQ: CRME), where he led a turnaround based on three pivotal financings, establishing a clinical development strategy, and procuring a new management team. In his role as a founder and board member of companies, Dr. Dhillon has been involved in several early stage healthcare-focused companies listed on U.S. or Canadian stock exchanges, which have successfully matured through advances in their development pipeline and subsequent M&A transactions. Most recently, he was a founding board member (May 2003) of Protox Therapeutics, Inc. (TSX-V: SHS) (now Sophiris Bio Inc.), a publicly traded specialty pharmaceutical company. Dr. Dhillon maintained his board position until the execution of a financing of up to $35 million with Warburg Pincus in November 2010. Dr. Dhillon currently sits on the Board of Directors of BC Advantage Funds, a Venture Capital Corporation in British Columbia,

and since March 2012 has been the Chairman of the Board of Directors of Stevia First Corp. (OTCQB: STVF), an agricultural biotechnology company engaged in the cultivation and harvest of stevia leaf and the development of stevia products. Since March 2011, Dr. Dhillon has also served as the Chairman of the Board of Directors of of OncoSec Medical, Inc. (OTCQB: ONCS), a company developing its advanced-stage ImmunoPulse DNA-based immunotherapy to treat solid tumor and metastatic cancers. Dr. Dhillon adds value to our Board of Directors with his extensive experience as a member of boards of directors and senior management of other public companies and with his experience in company building, financing, and licensing with large industry partners.

Dr. Arthur Rosenthal. Dr. Rosenthal has been appointed as a director of the Company upon the consummation of the Merger, and has served as the Chairman of the Board of ABS since April 2011. He has served for 40 years in senior research and product development executive roles for medical technology companies and in those roles has successfully directed commercialization efforts for hundreds of novel medical products. He was Chief Scientific Officer at Boston Scientific from January 1994 to January 2005, Vice President of Research and Development at Johnson and Johnson Medical Products, Inc. from April, 1990 to January, 1994 and more recently Chief Executive Officer of two start-up companies, Labcoat, Ltd. and Cappella, Inc., both developing cardiovascular medical devices. He is currently, and has been since January 2010, a Professor of Practice in Translational Research in Boston University’s College of Engineering, where he oversees biomedical engineering innovation. Dr. Rosenthal received his Ph.D. in biochemistry from the University of Massachusetts, Amherst, in 1973. Currently, Dr. Rosenthal serves as Non-Executive Director and Chairman and as a member of the Compensation Committee and Audit Committee for Cyberonics, Inc. (NASDAQ: CYBX), having joined its Board of Directors in January 2007. Dr. Rosenthal is a valuable member of our Board of Directors because of his high-ranking roles in private and public medical device companies, his extensive experience overseeing research and development and commercialization of a large number of products in the medical field, and his company-building acumen.

Dr. Terrence W. Norchi. Dr. Terrence W. Norchi commenced service as our President, Chief Executive Officer and Interim Chief Financial Officer and a director on our Board of Directors on April 23, 2013. As a result of the appointment of Alan T. Barber as the Company's Chief Financial Officer concurrently with the closing of the Merger, Dr. Norchi no longer serves as the Company's Interim Chief Financial Officer. Dr. Norchi also serves as the President and Chief Executive Officer and a director of ABS, and has served in those positions since co-founding ABS in 2006. Prior to founding ABS, Dr. Norchi was a portfolio manager and pharmaceutical analyst at Putnam Investments from April 2002 to September 2004. Prior to that he served as the senior global biotech and international pharmaceutical equity analyst at Citigroup Asset Management from January 2000 to March 2002, and as a sell-side analyst covering non-U.S. pharmaceutical equities at Sanford C. Bernstein in New York City from September 1996 to December 1999. Dr. Norchi earned an M.B.A. from the Massachusetts Institute of Technology, Sloan School of Management in 1996. Dr. Norchi earned an M.D. degree in 1990 from Northeast Ohio Medical University and completed his internal medicine residency in 1994 at Baystate Medical Center, Tufts University School of Medicine, where he was selected to serve as Chief Medical Resident. Dr. Norchi brings to our Board of Directors invaluable experience and knowledge of our core technology and proposed product candidates as a result of his first-hand experience with the development of that technology, having ushered it from the research laboratory to its current stage of development, and also contributes his investing experience as a former public company analyst and a portfolio manager.

Alan T. Barber. Mr. Barber was appointed as the Chief Financial Officer of the Company effective as of the consummation of the Merger in June 2013, and has served as the Chief Financial Officer of ABS since August 2008. He has over 30 years of financial management experience and has been since September 2005, and continues to be, an independent consultant to various companies on financial matters. Prior to that Mr. Barber was the Chief Financial Officer for a number of technology and life science companies including Biotrove, Inc. from April 2004 to September 2005, Omnisonics Medical Technologies, Inc. from October 2001 to April 2004, Innovation Chain, Inc. from October 2000 to September 2001, MyWay.com from December 1999 to October 2000, Medical Foods, Inc. from November 1997 to October 1999 and Ergo Science, Inc. from October 1993 to November 1997. Prior to that Mr. Barber was a Partner with the international accounting firm of PricewaterhouseCoopers (formerly Coopers & Lybrand) from July 1979 to October 1993 where he was elected as a Partner in the firm in July 1986. Prior to that he worked for the international accounting firm KPMG from May 1975 to July 1979. Mr. Barber received a Bachelor of Science degree in Accounting from the Florida State University, Rovetta School of Business, and is a Certified Public Accountant.

William M. Cotter. Mr. Cotter was appointed Chief Operating Officer in July 2013. He is an industry veteran who brings expertise in operations and product development in his role with the Company. Mr. Cotter has over 30 years of operational experience with various medical device, diagnostics, biologics and life science companies, ranging from early stage start-ups to large multinational corporations. Most recently, Mr. Cotter has provided consulting and advisory services to early stage biomaterials and medical device companies, including providing advisory services since 2011 to ABS. Prior to that, Mr. Cotter served in senior operations and development roles for various companies including Cohera Medical from January 2009 to January 2012, Helicos Biosciences from May 2007 to June 2008, Closure Medical Corporation (acquired by Johnson & Johnson) from June 1997 to June 2007, Sanofi Diagnostics Pasteur (acquired by Beckman Coulter) from June 1989 to June 1997, Genetic Systems Corporation (acquired by Bio-Rad) from June 1984 to June 1989 and Advanced Technology Laboratories (acquired by Philips HealthCare) April 1980 to June 1984. While with Closure Medical Corporation, Mr. Cotter served as the Vice President of Operations and had direct responsibility and accountability for all product transfers from R&D, Engineering, Quality Control, Document Control, Production and Logistics. During that tenure, Mr. Cotter was part of a team that developed Closure Medical Corporation's Dermabond®, the first synthetic topical skin adhesive approved by the U.S.

Food and Drug Administration, and was the development project leader and co-inventor of the Dermabond TSA ProPen delivery applicator, which won the 2004 Medical Design Excellence Gold Medal Award. Mr. Cotter was also an integral part of the Closure Medical Corporation senior management team that led to a successful acquisition by Johnson & Johnson in June 2005. Prior to his tenure at Closure Medical Corporation, Mr. Cotter spent eight years with Sanofi Diagnostics Pasteur, where he had direct responsibility for all North American industrial sites and chaired that company's World Wide Manufacturing Committee. Mr. Cotter is listed as co-inventor on eight U.S. patents, and is a graduate of Ohio University.

Term of Office of Directors

Our directors are elected at each annual meeting of stockholders and serve until the next annual meeting of stockholders or until their successor has been duly elected and qualified, or until their earlier death, resignation or removal.

Family Relationships

No family relationships exist between any of our current or former directors or executive officers.

Involvement in Certain Legal Proceedings

No director, executive officer or control person of the Company has been involved in any legal proceeding listed in Item 401(f) of Regulation S-K in the past 10 years.

Committees of the Board of Directors

Our Board of Directors has not established a separate standing audit committee within the meaning of Section 3(a)(58)(A) of the Exchange Act, nor has it established a separate standing compensation committee or a nominating and corporate governance committee. Instead, the functions of those committees are performed by our full Board of Directors, or our two independent directors acting in an executive session or otherwise without the participation of any non-independent directors, and will continue to do so upon the appointment of any new directors until such time as separate standing committees have been established. Our Board of Directors has determined that there is not presently an audit committee financial expert serving on our Board of Directors. We are seeking to add an audit committee financial expert as a member of our Board of Directors in the near term, upon identification and recruitment of a qualified and otherwise suitable candidate.

EXECUTIVE COMPENSATION

The following table summarizes all compensation recorded by us in each of the fiscal years ended September 30, 2013 and September 30, 2012 for (i) our principal executive officer, (ii) our two next most highly compensated executive officers whose total compensation exceeded $100,000 during our last completed fiscal year (of which there were none), and (iii) certain of our additional executive officers, whose compensation is voluntarily provided.

Summary Compensation Table

Name	Fiscal Year	Salary ($)	Option Awards ($) (4)	All Other Compensation ($)	Total ($)
Dr. Terrence W. Norchi,	2013	171,923	—	—	171,923
President and Chief Executive Officer (1)	2012	125,000	—	—	125,000
William M. Cotter,	2013	43,750	38,009	—	81,759
Chief Operating Officer (2)	2012	—	—	—	—
Alan T. Barber,	2013	53,015	13,806	—	66,821
Chief Financial Officer (3)	2012	10,640	—	—	10,640

———————————

(1) Dr. Norchi was the President and Chief Executive Officer of ABS since its inception in 2006, and was appointed as our President, Chief Executive Officer and Interim Chief Financial Officer on April 23, 2013. Dr. Norchi resigned as our Interim Chief Financial Officer upon the appointment of Mr. Barber as our Chief Financial Officer on June 26, 2013. Salary amounts reflected include $100,000 and $125,000 earned by Dr. Norchi in connection with his services for ABS during the fiscal years ended September 30, 2013 and 2012, respectively, and $71,923 earned by Dr. Norchi in connection with his service as an executive officer of the Company during the fiscal year ended September 30, 2013.

(2) Mr. Cotter was appointed as our Chief Operating Officer on July 2, 2013. Salary amounts reflected include amounts earned by Mr. Cotter in connection with his service as an executive officer of the Company during the fiscal year ended September 30, 2013.

(3) Mr. Barber served as a consultant for ABS until his appointment as our Chief Financial Officer on June 26, 2013. Salary amounts reflected include $31,150 and $10,640 earned by Mr. Barber in connection with his services for ABS during the fiscal years ended September 30, 2013 and 2012, respectively, and $21,865 earned by Mr. Barber in connection with his service as an executive officer of the Company during the fiscal year ended September 30, 2013.

(4) The values listed represent the fair value of the option grants that was recognized during the fiscal year ended September 30, 2013 under ASC Topic 718, which is calculated as of the grant date using a Black-Scholes option-pricing model. For information on the valuation assumptions with respect to option grants made during the fiscal year ended September 30, 2013, refer to Note 9 “Stock-Based Compensation” in our consolidated financial statements for the fiscal year ended September 30, 2013, included in this prospectus.

Mr. Joey Power served as our sole officer and director prior to the Merger, and resigned from all such positions on April 23, 2013. No compensation was awarded, earned or paid by the Company to Mr. Power for his service in such positions.

Employment Agreements with Named Executive Officers

Terrence W. Norchi

Effective as of June 26, 2013, we entered into an executive employment agreement with Dr. Terrence W. Norchi, our President and Chief Executive Officer. Dr. Norchi's employment agreement continues until terminated by us or Dr. Norchi, and provides for an initial annual base salary of $275,000 and eligibility to receive an annual cash bonus in an amount up to 30% of Dr. Norchi's then-current annual base salary. Annual bonuses are awarded at the sole discretion of our Board of Directors. If Dr. Norchi's employment agreement is terminated by us, unless it is terminated by us "For Cause" (as defined in the agreement), or is terminated by Dr. Norchi for "Good Reason" (as defined in the agreement), then Dr. Norchi, upon signing a release in favor of the Company, will be entitled to severance in an amount equal to 12 months of Dr. Norchi's then-current annual base salary, payable in the form of salary continuation, plus, if Dr. Norchi elects and subject to certain other conditions, payment of Dr. Norchi's premiums to continue his group health coverage under COBRA until the earlier of (i) 12 months following the date of such termination; or (ii) the date Dr. Norchi becomes covered under another employer's health plan. In addition, Dr. Norchi's employment agreement provides that, in the event of a change of control of the Company, termination by Dr. Norchi for Good Reason, termination by the Company for any reason other than For Cause, or termination as a result of Dr. Norchi's death, all unvested shares under outstanding equity grants to Dr. Norchi, if any, shall automatically accelerate and become fully vested.

Dr. Norchi's employment agreement provides the following definitions of "For Cause" and "Good Reason": (a) "For Cause" is the commission by the executive of a crime involving dishonesty, breach of trust, or physical harm to any person, executive's engagement by the executive in conduct that is in bad faith and materially injurious to the Company, commission by the executive of a material breach of the employment agreement, willful refusal by the executive to implement or follow a lawful policy or directive of the Company, or executive's engagement in misfeasance or malfeasance demonstrated by a pattern of failure to perform job duties diligently and professionally (other than any such failure resulting from Executive's incapacity due to physical or mental illness); and (b) "Good Reason" is a material reduction in executive's annual base salary, except for reductions that are comparable to reductions generally applicable to similarly-situated executives of the Company, the relocation of executive to a facility or location that is more than 50 miles from his primary place of employment and such relocation results in an increase in executive's one-way driving distance by more than 50 miles, or a material and adverse change in executive's authority, duties, or responsibilities with the Company or a material and adverse change in executive's reporting relationship within the Company.

In connection with our entry into the executive employment agreement with Dr. Norchi, effective on June 26, 2013, Dr. Norchi's former employment agreement with ABS was terminated pursuant to a termination agreement and release between Dr. Norchi and ABS.

William M. Cotter

Effective as of July 8, 2013, we entered into an executive employment agreement with Mr. Cotter. The agreement continues until terminated by us or by Mr. Cotter. Pursuant to the terms of the agreement, Mr. Cotter is entitled to an initial annual base salary of $175,000 and is eligible to receive an annual cash bonus in an amount of up to 20% of Mr. Cotter's then-current annual base salary. Annual bonuses are awarded at the sole discretion of our Board of Directors. If the agreement is terminated by us at any time after January 1, 2014, unless it is terminated by us "For Cause" (as defined in the agreement), or is terminated by Mr. Cotter at any time for "Good Reason" (as defined in the agreement), then Mr. Cotter, upon signing a release in favor of the Company, would be entitled to severance in an amount equal to six months of Mr. Cotter's then-current annual base salary payable in the form of salary continuation, plus monthly reimbursement of up to $1,200 for Mr. Cotter's health, dental and vision benefits coverage premiums until the earlier of (i) 12 months following the date of such termination, or (ii) the date Mr. Cotter becomes covered under another employer's health plan. In addition, in the event of a change of control of the Company, termination by Mr. Cotter for Good Reason, or termination as a result of Mr. Cotter's death or disability, the agreement provides that all unvested shares under outstanding equity grants to Mr. Cotter, if any, shall accelerate and become fully vested.

The agreement provides the following definitions of “For Cause” and “Good Reason”: (a) “For Cause” is the executive’s commission of a crime involving dishonesty, breach of trust, or physical harm to any person, the executive’s engagement in conduct that is in bad faith and materially injurious to the Company, the executive’s commission of a material breach of the employment agreement, the executive’s willful refusal to implement or follow a lawful policy or directive of the Company, or the executive’s engagement in misfeasance or malfeasance demonstrated by a pattern of failure to perform job duties diligently and professionally; and (b) “Good Reason” is, without the executive’s written consent, a material reduction in the executive’s annual base salary (except for reductions that are comparable to reductions generally applicable to similarly-situated executives of the Company), a relocation of the executive to a facility or location that is more than 50 miles from his primary place of employment and results in an increase in one-way driving distance by more than 50 miles (provided that any such relocation shall not constitute Good Reason if the executive is permitted to perform his duties remotely from or near his home for two weeks per month), or a material and adverse change in the executive’s authority, duties, or responsibilities with the Company or reporting relationship within the Company.

Alan T. Barber

Effective as of June 26, 2013, we entered into an executive employment agreement with Mr. Barber with an effective start date of June 26, 2013, pursuant to which Mr. Barber is obligated to perform his duties on a part-time basis and as compensation for such service receives an annual base salary of $83,600. Mr. Barber’s employment agreement continues until terminated by us or by Mr. Barber. Upon any termination of the employment agreement, whether by us, by Mr. Barber or as a result of Mr. Barber’s death or disability, Mr. Barber is not entitled to any severance payments or benefits.

Outstanding Equity Awards At Fiscal Year-End

The following table summarizes the aggregate number of option awards held by our named executive officers at September 30, 2013:

Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable		Option Exercise Price ($)	Option Expiration Date
Dr. Terrence W. Norchi	—	—		—	—
William M. Cotter	200,000	600,000	(1)	0.37	12/31/2017

	62,500	187,500	(2)	0.40	09/09/2023
Alan T. Barber	56,250	168,750	(3)	0.37	12/31/2017
	31,250	93,750	(4)	0.40	09/09/2023

(1) Represents an option to purchase 800,000 shares of common stock with a grant date of July 2, 2013. The option vests over a three-year period as follows: 25% of the shares subject to the option vested on July 1, 2013, 25% of the shares subject to the option vest 12 months after July 1, 2013, and 1/24th of the remaining unvested shares vest monthly thereafter, with all shares underlying the option subject to automatic acceleration of vesting upon a corporate transaction or change in control (as such terms are defined under the 2013 Plan). To the extent vested, the option may only be exercised during the 2017 calendar year, unless we undergo a corporate transaction or change in control or Mr. Cotter separates from service with us in a calendar year earlier than 2017, in which case the option must be exercised during such earlier calendar year.

(2) Represents an option to purchase 250,000 shares of common stock granted on September 9, 2013. The vesting period of the shares underlying the option commenced on the date of grant, with 25% of the shares vested immediately on the date of grant, 25% of the shares to vest 12 months following the date of grant, and the remaining 50% of the shares to vest thereafter in equal installments on each monthly anniversary of the date of grant.

(3) Represents an option to purchase 225,000 shares of common stock with a grant date of June 26, 2013. The option vests over a three-year period as follows: 25% of the shares subject to the option vested on July 1, 2013, 25% of the shares subject to the option vest 12 months after July 1, 2013, and 1/24th of the remaining unvested shares vest monthly thereafter, with all shares underlying the option subject to automatic acceleration of vesting upon a corporate transaction or change in control (as such terms are defined under the 2013 Plan). To the extent vested, the option may only be exercised during the 2017 calendar year, unless we undergo a corporate transaction or change in control or Mr. Barber separates from service with us in a calendar year earlier than 2017, in which case the option must be exercised during such earlier calendar year.

(4) Represents an option to purchase 125,000 shares of common stock granted on September 9, 2013. The vesting period of the shares underlying the options commenced on the date of grant, with 25% of the shares vested immediately on the date of grant, 25% of the shares to vest 12 months following the date of grant, and the remaining 50% of the shares to vest thereafter in equal installments on each monthly anniversary of the date of grant.

Compensation of Directors

On September 10, 2013, our Board of Directors adopted a director compensation policy for non-employee directors. That policy provides that, retroactive to Board service provided since July 1, 2013, the person serving as the Chairman of our Board of Directors and the Chairman of our Finance Committee receives an aggregate annual cash fee of $110,000 for those chairperson roles, and all other non-employee directors receive an annual cash fee of $35,000. In addition, the policy provides the Board of Directors the discretion to grant equity awards to our non-employee directors as additional compensation for their Board service, at such times, in such form and amount and with such terms as the Board of Directors may determine in its discretion.

The following table summarizes all compensation paid to our non-employee directors during the fiscal year ended September 30, 2013:

Director Compensation Table

Name	Fees Earned or Paid In Cash ($)	Stock Awards ($)	Option Awards ($)(1)	All other Compensation ($)	Total ($)
Dr. Avtar Dhillon	27,500	—	—	—	27,500
Dr. Arthur Rosenthal	8,750	—	28,911 (2)	—	37,661

(1)

The values listed represent the fair value of the option grants that was recognized during the fiscal year ended September 30, 2013 under ASC Topic 718, which is calculated as of the grant date using a Black-Scholes option-pricing model. For information on the valuation assumptions with respect to option grants made during the fiscal year ended September 30, 2013, refer to Note 9 “Stock-Based Compensation” in our consolidated financial statements for the fiscal year ended September 30, 2013, included in this prospectus.

(2) Represents a non-qualified stock option to purchase 500,000 shares of common stock with a grant date of June 26, 2013, an exercise price of $0.37 and a 10-year term. The option vests over a three-year period as follows: 25% of the shares subject to the option vested on July 1, 2013, 25% of the shares subject to the option vest 12 months after July 1, 2013, and 1/24th of the remaining unvested shares vest monthly thereafter, with all shares underlying the option subject to automatic acceleration of vesting upon a corporate transaction or change in control (as such terms are defined under the 2013 Plan). To the extent vested, the option may only be exercised during the 2017 calendar year, unless we undergo a corporate transaction or change in control or Dr. Rosenthal separates from service with us in a calendar year earlier than 2017, in which case the option must be exercised during such earlier calendar year.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

Except for Dr. Terrence Norchi, our President, Chief Executive Officer, former Interim Chief Financial Officer and a director, and Dr. Dhillon, the Chairman of our Board of Directors, who each became executive officers and/or directors of our Company shortly following the Company's and ABS's entry into a binding letter of intent regarding the terms of the Merger (the "LOI"), none of the current directors and executive officers were directors or executive officers of the Company prior to the closing of the Merger, nor did any hold any position with the Company prior to the closing of the Merger, nor have any been involved in any material proceeding adverse to the Company or any transactions with the Company or any of its directors, executive officers, affiliates or associates that are required to be disclosed pursuant to the rules and regulations of the SEC.

Dr. Terrence Norchi and Dr. Avtar Dhillon were appointed to their officer and director positions with us on April 23, 2013, shortly following the entry into the LOI between the Company and ABS relating to the Merger. Each of Dr. Avtar Dhillon and Dr. Terrence Norchi also held, and continue to hold, positions with ABS, with Dr. Norchi serving as the President, Chief Executive Officer and a director of ABS and Dr. Dhillon serving as a director of ABS. As a result, each of Dr. Norchi and Dr. Dhillon were directors and/or officers of us and of ABS upon the signing of the Merger Agreement on May 10, 2013. Further, it was a condition to the closing of the Merger that Dr. Norchi and Dr. Dhillon, or their respective designees, each receive, on or before the closing of the Merger, 10,000,000 shares of our common stock in private transfers from the former holders thereof. As a result of those transfers and other shares of our common stock to which Dr. Norchi and Dr. Dhillon became entitled in exchange for their former shares and convertible notes of ABS, as of the closing of the Merger, Dr. Norchi and Dr. Dhillon collectively held or otherwise controlled approximately 25.8% of our common shares on a fully diluted basis and approximately 31.7% of our outstanding common shares. As of May 1, 2014, Dr. Norchi and Dr. Dhillon collectively held or otherwise controlled approximately 16.0% of our common shares on a fully diluted basis and approximately 25.7% of our outstanding common shares. The number of shares of our common stock received by Dr. Norchi and Dr. Dhillon in connection with the Merger was negotiated by the parties to the LOI and was determined without input from any independent third party.

As a result of his ownership of 23,260 shares of ABS immediately prior to the closing of the Merger, Dr. Arthur Rosenthal became entitled to receive an aggregate of 58,400 shares of the Company's common stock upon the closing of the Merger.

On June 19, 2013, Dr. Terrence Norchi purchased from ABS an aggregate amount of $15,397 of certain convertible promissory note and warrant positions (the "Repurchased Securities"). The Repurchased Securities had originally been issued by ABS to third parties in June 2009, were repurchased by ABS from the original holders on April 30, 2013, and were resold to Dr. Norchi and other third party purchasers effective June 19, 2013. The Repurchased Securities were first issued by ABS to the original holders thereof in a bridge loan transaction in expectation of potential financings of ABS's capital stock. In contemplation of the Merger, any such potential financing of ABS's capital stock was abandoned and such Repurchased Securities were amended and restated to provide for (i) the conversion of all amounts owed under the convertible promissory notes into an aggregate of 1,349,614 shares of the Company's

common stock upon the closing of the Merger, calculating to approximately one share of the Company's common stock for each $0.27 outstanding under the notes, and (ii) the cancellation of the warrants in full upon the closing of the Merger. Accordingly, Dr. Norchi became entitled to receive 56,103 shares of the Company's common stock upon the closing of the Merger as a result of his purchase of $15,397 worth of the Repurchased Securities.

Pursuant to the terms of Dr. Norchi's former employment agreement with ABS, Dr. Norchi was entitled to receive a cash bonus in the amount of $500,000 and certain warrants to acquire ABS's capital stock upon the closing of a capital raise by ABS of at least $1,000,000. Dr. Norchi agreed to defer his right to receive such cash bonus and warrants at the time they became due and issuable upon ABS's satisfaction of that capital raise condition. In connection with the closing of the Merger on June 26, 2013 and the concurrent entry into an executive employment agreement with the Company, Dr. Norchi and ABS entered into a termination agreement and release pursuant to which Dr. Norchi's employment agreement with ABS has been terminated by mutual agreement effective as of the closing of the Merger and Dr. Norchi has agreed to waive in full any and all right to receive such cash bonus and warrants.

Commencing in February 2009, Dr. Norchi loaned ABS an aggregate amount of $275,200 in several installments. On January 21, 2010, ABS issued a promissory note to Dr. Norchi in exchange for that loan in principal amount of $275,200, which promissory note, as amended, bore interest at the rate of 6% per annum through December 31, 2009 and at the rate of 10% per annum thereafter, was due upon demand and was unsecured. On June 24, 2013, ABS paid to Dr. Norchi all amounts due and owing under such promissory note, which totaled $373,488 as of such date.

On July 11, 2011, the Company issued a total of 4,000,000 shares of common stock to its then-President, Chief Executive Officer and sole director Mr. Joey Power at a price of $0.005 per share for an aggregate amount of $20,000 in a private offering.

Review, Approval or Ratification of Transactions with Related Persons

Due to the small size of our Company, at this time we have determined to rely on our full Board of Directors to review related party transactions and identify and prevent conflicts of interest. Our Board of Directors reviews a transaction in light of the affiliations of the director, officer, employee or stockholder and the affiliations of such person's immediate family. Transactions are presented to our Board of Directors for approval before they are entered into or, if that is not possible, for ratification after the transaction has occurred. If our Board of Directors finds that a conflict of interest exists, then it will determine the appropriate remedial action, if any. Our Board of Directors approves or ratifies a transaction if it determines that the transaction is consistent with the best interests of the Company and its stockholders. The procedures described above have been approved by resolutions adopted by our Board of Directors.

Director Independence

Our Board of Directors has determined that Dr. Avtar Dhillon and Dr. Arthur Rosenthal would qualify as "independent" as that term is defined by Nasdaq Listing Rule 5605(a)(2). Further, although we have not established separately designated audit, nominating or compensation board committees, Dr. Dhillon and Dr. Rosenthal would qualify as "independent" under Nasdaq Listing Rules applicable to all such board committees. Dr. Terrence W. Norchi would not qualify as "independent" under Nasdaq Listing Rules applicable to the Board of Directors generally or to separately designated board committees because he currently serves as our President and Chief Executive Officer. Mr. Joey Power, who served as our sole director prior to the Merger and resigned on April 23, 2013, also did not qualify as "independent" under such Nasdaq Listing Rules because he served as our President, Chief Executive Officer and Chief Financial Officer during that period.

Subject to some exceptions, Nasdaq Listing Rule 5605(a)(2) provides that an independent director is a person other than an executive officer or other employee of the Company or any other individual having a relationship which, in the option of our Board of Directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of a director, provided that a director will not be independent if (a) the director is, or in the past three years has been, an employee of ours; (b) a member of the director's immediate family is, or in the past three years has been, an executive officer of ours; (c) the director or a member of the director's immediate family has received more than $120,000 per year in direct compensation from us within the preceding three years, other than for service as a director or benefits under a tax-qualified retirement plan or non-discretionary compensation (or, for a family member, as a non-executive employee); (d) the director or a member of the director's immediate family is a current partner of our independent public accounting firm, or has worked for such firm in any capacity on our audit at any time during the past three years; (e) the director or a member of the director's immediate family is, or in the past three years has

been, employed as an executive officer of a company where one of our executive officers serves on the compensation committee; or (f) the director or a member of the director’s immediate family is an executive officer, partner or controlling shareholder of a company that makes payments to, or receives payments from, us in an amount which, in any twelve-month period during our past three fiscal years, exceeds the greater of 5% of the recipient's consolidated gross revenues for that year or $200,000 (except for payments arising solely from investments in our securities or payments under non-discretionary charitable contribution matching programs).

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The following table sets forth certain information regarding the beneficial ownership of our common stock by (i) each person who, to our knowledge, owns more than 5% of our common stock, (ii) each of our directors and named executive officers, and (iii) all of our directors and named executive officers as a group. As of May 1, 2014, the individual that served as our sole director and officer prior to the Merger beneficially owned no shares of our common stock. Unless otherwise indicated in the footnotes to the following table, the address of each person named in the table is: c/o Arch Therapeutics, Inc., 20 William St., Suite #270, Wellesley, Massachusetts 02481. The information set forth in the table below is based on 72,076,487 shares of our common stock outstanding on May 1, 2014. Shares of our common stock subject to options, warrants, or other rights currently exercisable or exercisable within 60 days of May 1, 2014, are deemed to be beneficially owned and outstanding for computing the share ownership and percentage of the person holding such options, warrants or other rights, but are not deemed outstanding for computing the percentage of any other person.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage Beneficially Owned (1)	
5%+ Stockholders:			
Twelve Pins Partners, LLC (2)	10,000,000	13.87	%
Fitzroy Ltd (3)	5,000,000	6.94	%
CCA, as investment manager for Cranshire Master Fund and a managed account for Equitec (4)	4,000,000	5.55	%
Directors and Named Executive Officers:			
Avtar Dhillon	7,160,373	9.93	%
Terrence W. Norchi (5)	11,419,076	15.84	%
Arthur Rosenthal	58,400	*	
William M. Cotter (6)	62,500	*	
Alan T. Barber (7)	31,250	*	
Current Directors and Named Executive Officers as a Group (5 persons)	18,637,849	25.86	%

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* Less than 1%

(1) Except as otherwise indicated, we believe that each of the beneficial owners of the common stock listed above, based on information furnished by such owners, has sole investment and voting power with respect to the shares listed as beneficially owned by such owner, subject to community property laws where applicable. Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities.

(2) Dr. Norchi is the sole member of Twelve Pins Partners, LLC and has sole voting and investment control with respect to the shares it holds. Dr. Norchi disclaims beneficial ownership of these securities except to the extent of his pecuniary interest therein.

(3) Includes 2,500,000 shares exercisable within 60 days after May 1, 2014. Roger Knox exercises the sole voting and dispositive power over the securities held of record held by Fitzroy Ltd. The address of the stockholder is Trust Company Complex, Ajeltake Road, Ajeltake Island, Majuro, Marshall Islands MH96960.

(4) Represents (a) 3,200,000 shares of common stock held of record by Cranshire Master Fund, which represent approximately 4.4% of the common stock, and (b) 800,000 shares of common stock held of record by Equitec, which represent approximately 1.1% of the common stock. CCA serves as the investment manager of Cranshire Master Fund and as the investment manager to a managed account for Equitec, and consequently has voting control and investment discretion over securities held of record by each such entity. Mr. Kopin has voting control over CCA. As a result, each of Mr. Kopin and CCA may be deemed to have beneficial ownership (as determined under Section 13(d) of the Exchange Act) of the securities held of record by Cranshire Master Fund and Equitec. The address of the stockholder is c/o Cranshire Capital Advisors, LLC, 3100 Dundee Road, Suite 703, Northbrook, Illinois 60062.

(5) Represents (a) 10,000,000 shares of our common stock held by Twelve Pins Partners, LLC, with respect to which Dr. Norchi holds sole voting and investment control, and (b) 1,419,076 shares issued to Dr. Norchi upon the closing of the Merger in exchange for the cancellation of shares of common stock and convertible notes of ABS owned by him immediately prior to the closing of the Merger. Dr. Norchi disclaims beneficial ownership of

the securities held by Twelve Pins Partners, LLC except to the extent of his pecuniary interest therein.

(6) Includes 62,500 shares exercisable within 60 days after May 1, 2014.

(7) Includes 31,250 shares exercisable within 60 days after May 1, 2014.

LEGAL MATTERS

The validity of the common stock being offered hereby has been passed upon for us by McDonald Carano Wilson LLP, Reno, Nevada.

EXPERTS

Moody, Famiglietti & Andronico, LLP, an independent registered public accounting firm, has audited our consolidated financial statements for the years ended September 30, 2013 and 2012, and for the period from inception (March 6, 2006) to September 30, 2013, as stated in its report appearing herein, and such audited consolidated financial statements have been so included in reliance upon the report of such firm given upon its authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read or obtain a copy of these reports at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549, on official business days during the hours of 10:00 am to 3:00 pm. You may obtain information on the operation of the public reference room and its copy charges by calling the SEC at 1-800-SEC-0330. The SEC maintains a website, at http://www.sec.gov, that contains registration statements, reports, proxy information statements and other information regarding registrants that file electronically with the SEC, including us. Our website address is http://www.archtherapeutics.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this document.

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock being offered by this prospectus. This prospectus is part of that registration statement. This prospectus does not contain all of the information set forth in the registration statement or the exhibits to the registration statement. For further information with respect to us and the shares we are offering pursuant to this prospectus, you should refer to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract, agreement or other document referred to are not necessarily complete, and you should refer to the copy of that contract or other documents filed as an exhibit to the registration statement. You may read or obtain a copy of the registration statement at the SEC's public reference room and website referred to above.

Arch Therapeutics, Inc.

(A Development Stage Company)

CONSOLIDATED FINANCIAL STATEMENTS

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of Arch Therapeutics, Inc.

Wellesley, Massachusetts

We have audited the accompanying consolidated balance sheets of Arch Therapeutics, Inc. and subsidiary (the "Company") as of September 30, 2013 and 2012, and the related consolidated statements of operations, changes in stockholders' equity (deficit) and cash flows for the years then ended and for the period from inception (March 6, 2006) through September 30, 2013. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Arch Therapeutics, Inc. and subsidiary as of September 30, 2013 and 2012, and the results of their operations and their cash flows for the years then ended and for the period from inception (March 6, 2006) through September 30, 2013, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that Arch Therapeutics, Inc. and subsidiary will continue as a going concern. As discussed in Notes 1 and 2 to the consolidated financial statements, the Company has an accumulated deficit, has suffered significant net losses and negative cash flows from operations, and has limited working capital that raises substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Notes 1 and 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Moody, Famiglietti & Andronico, LLP

Tewksbury, MA

April 30, 2014

Arch Therapeutics, Inc.
(A Development Stage Company)
Consolidated Balance Sheets
September 30, 2013 and 2012

	September 30, 2013	September 30, 2012
ASSETS		
Current assets:		
Cash and cash equivalents	$ 557,319	$ 17,139
Promissory Note Receivable	1,000,000	-
Prepaid expenses and other current assets	19,629	3,308
Total current assets	1,576,948	20,447
Long Term Assets:		
Property and equipment, net	322	908
Other Assets	10,062	-
Total long-term assets	10,384	908
Total assets	$ 1,587,332	$ 21,355
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
Current liabilities:		
Current maturities of convertible notes payable	$ -	$ 1,395,000
Current maturities of convertible notes payable, related parties	-	105,000
Notes payable, related party	-	275,200
Accounts payable	314,769	258,426
Accrued expenses and other liabilities	140,840	49,510
Current Portion of accrued interest	-	352,755
Accrued interest to related parties	-	116,548
Total current liabilities	455,609	2,552,439
Long-term liabilities:		
Note payable	944,707	-
Convertible notes payable, net of current maturities	-	235,000
Accrued interest, net of current portion	-	6,351
Total long-term liabilities	944,707	241,351
Total liabilities	1,400,316	2,793,790
Commitments and contingencies		
Stockholders’ equity (deficit):		
Common stock, $0.001 par value, 300,000,000 shares authorized at September 30, 2013 and 75,000,000 at September 30, 2012, 60,145,237 and 5,645,212 shares issued and outstanding at September 30, 2013 and September 30, 2012, respectively	60,145	5,645
Additional paid in capital	4,758,742	-
Deficit accumulated during the development stage	(4,631,871)	(2,778,080)

Total stockholders’ equity (deficit)	187,016	(2,772,435)
Total liabilities and stockholders' equity (deficit)	$ 1,587,332	$ 21,355

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

Arch Therapeutics, Inc.
(A Development Stage Company)
Consolidated Statements of Operations
Years Ended September 30, 2013 and 2012 and the
Period from Inception (March 6, 2006) through September 30, 2013

	Fiscal year ended September 30, 2013	Fiscal year ended September 30, 2012	Period from Inception (March 6, 2006) through September 30, 2013
Other Revenues	$ -	$ -	$ 431,461
Operating expenses:			
General and administrative expenses	1,526,075	333,503	3,662,040
Research and development expenses	218,901	87,021	866,673
Total operating expenses	1,744,976	420,524	4,528,713
Operating loss	(1,744,976)	(420,524)	(4,097,252)
Other (expense) income:			
Interest expense	(108,879)	(156,865)	(588,597)
Other income	64	478	53,978
Total other expense	(108,815)	(156,387)	(534,619)
Net loss	$ (1,853,791)	$ (576,911)	$ (4,631,871)
Net loss per common share basic and diluted	$ (0.09)	$ (0.10)	
Weighted average number of shares outstanding	21,366,752	5,645,212	

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

Arch Therapeutics, Inc.

(A Development Stage Company)

Consolidated Statements of Changes in Stockholders' Equity (Deficit)

Period from Inception (March 6, 2006) through September 30, 2013

	Common Stock $0.001 Par Value		Additional Paid-in-	Deficit Accumulated During the Development	Total Stockholders'
	Shares	Amount	Capital	Stage	Deficit
Balance at inception (March 6, 2006)	-	$ -	$ -	$ -	$ -
Net loss	-	-	-	(18,153)	(18,153)
Balance at September 30, 2006	-	-	-	(18,153)	(18,153)
Issuance of common stock to founder on November 13 for $33 ($0.00001 per share)	3,198,105	3,198	-	-	3,198
Net loss	-	-	-	(450,038)	(450,038)
Balance at September 30, 2007	3,198,105	3,198	-	(468,191)	(464,993)
Net loss	-	-	-	(233,040)	(233,040)
Balance at September 30, 2008	3,198,105	3,198	-	(701,231)	(698,033)
Issuances of common stock to directors on May 13 (1)	1,524,721	1,525	-	-	1,525
Issuances of common stock in connection with a technology license on May 13 (1)	282,886	283	-	-	283
	11,242	11	-	-	11

Issuances of common stock to advisors and consultants on May 13 (1)					
Issuances of common stock to advisors and consultants on July 22 (1)	42,448	42	-	-	42
Issuances of common stock to advisors and consultants on September 22 (1)	8,722	9	-	-	9
Net loss	-	-	-	(504,687)	(504,687)
Balance at September 30, 2009	5,068,124	5,068	-	(1,205,918)	(1,202,527)
Issuances of common stock to advisors and consultants on October 21 (1)	259,240	259	-	-	259
Net loss	-	-	-	(420,093)	(420,093)
Balance at September 30, 2010	5,327,364	5,327	-	(1,626,011)	(1,622,361)
Issuances of common stock to advisors and consultants on December 16 (1)	82,279	82	-	-	82
Issuances of common stock to directors on May 24 (1)	213,764	214	-	-	214
Issuances of common stock to advisors and consultants on May 24 (1)	12,114	12	-	-	12
Net loss	-	-	-	(573,472)	(573,472)
Balance at September 30, 2011	5,635,521	5,636	-	(2,201,160)	(2,195,524)
Issuance of common stock to an advisor on June 17 (1)	9,691	9	-	-	9
Net loss	-	-	-	(576,911)	(576,911)
Balance at September 30, 2012	5,645,212	5,645	-	(2,778,080)	(2,772,435)
Net loss	-	-	-	(1,853,791)	(1,853,791)

Equity acquired in reverse merger on June 26	41,500,000	41,500	(41,500)	-	-
Issuance of common stock and 2,500,000 warrants to purchase 2,500,000 shares of common stock on June 26 for $1,250,000 ($0.50 per share)	2,500,000	2,500	1,247,500	-	1,250,000
Exchange of debt and accrued interest for common stock pursuant to reverse merger on June 26	9,000,025	9,000	2,461,022	-	2,470,022
Issuance of common stock and 500,000 warrants to purchase 500,000 shares of common stock on July 3 for $250,000 ($0.50 per share)	500,000	500	249,500	-	249,500
Issuance of common stock and 1,000,000 warrants to purchase 1,000,000 shares of common stock on August 30 for $500,000 ($0.50 per share)	1,000,000	1,000	499,000	-	499,000
Grant of one warrant to purchase 145,985 shares of common stock issued with note payable on September 30	-	-	55,293	-	55,293
Stock based compensation expense	-	-	287,927	-	287,927
Balance at September 30, 2013 (restated)	60,145,237	$ 60,145	$ 4,758,742	$ (4,631,871)	$ 187,016

(1) The Company performed an analysis of the value of its common stock as of each of these dates and determined the value per share is equivalent to par value which is considered to be de minimis.

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

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Arch Therapeutics, Inc.
(A Development Stage Company)
Consolidated Statement of Cash Flows
Years Ended September 30, 2013 and 2012 and the
Period from Inception (March 6, 2006) through September 30, 2013

	Fiscal year ended September 30, 2013 (restated)	Fiscal year ended September 30, 2012	Period from Inception (March 6, 2006) through September 30, 2013 (restated)
Cash flows from operating activities:			
Net loss	$ (1,853,791)	$ (576,911)	$ (4,631,871)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation expense	586	3,372	18,371
Other noncash adjustments	(92)	-	5,752
Stock based compensation	287,927	-	287,927
Noncash interest expense on convertible notes payable	82,147	118,657	441,253
Noncash interest expense on notes payable to related party	25,599	37,211	142,057
Repayment of accrued interest to related party	(98,288)	-	(98,288)
Issuance of common stock for services	-	1	253
Changes in operating assets and liabilities:			
(Increase) decrease in:			
Prepaid expenses and other current assets	(16,321)	648	(19,629)
Other Assets	(10,062)	-	(10,062)
Increase (decrease) in:			
Accounts payable	56,343	139,878	314,769
Accrued expenses and other liabilities	91,332	22,508	140,840
Net cash used in operating activities	(1,434,620)	(254,636)	(3,408,628)
Cash flows from investing activities:			
Purchases of property and equipment	-	-	(19,053)
Net cash used in investing activities	-	-	(19,053)
Cash flows from financing activities:			
Proceeds from issuance of common stock and warrants	2,000,000	-	2,000,000
Repayment of notes payable to related party	(275,200)	-	(275,200)
Proceeds from issuance of notes payable to related party	-	-	275,200
Proceeds from issuance of convertible notes payable to related party	-	-	105,000
Proceeds from issuance of convertible notes payable	250,000	235,000	1,880,000
Net cash provided by financing activities	1,974,800	235,000	3,985,000

Net increase in cash and cash equivalents	540,180	(19,636)	557,319
Cash and cash equivalents, beginning of period	17,139	36,775	-
Cash and cash equivalents, end of period	$ 557,319	$ 17,139	$ 557,319
Supplemental disclosure of cash flow information and non-cash financing activities			
Cash paid during the period for:			
Interest	$ 98,288	$ -	$ 98,288
Income taxes	$ -	$ -	$ -
Debt with warrants issued for promissory notes receivable	$ 1,000,000	$ -	$ 1,000,000
Exchange of convertible notes and related accrued interest for common stock	$ 2,470,022	$ -	$ 2,470,022

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

Notes to the Consolidated Financial Statements

1. DESCRIPTION OF BUSINESS

Arch Therapeutics, Inc. and subsidiary (the "Company") was incorporated under the laws of State of Nevada on September 16, 2009 under the name "Almah, Inc." to pursue the business of distributing automobile spare parts online. Effective June 26, 2013, the Company completed a merger (the "Merger") with Arch Biosurgery, Inc. (formerly known as Arch Therapeutics, Inc.), a Massachusetts corporation ("ABS"), and Arch Acquisition Corporation ("Merger Sub"), the Company's wholly owned subsidiary formed for the purpose of the transaction, pursuant to which Merger Sub merged with and into ABS and ABS thereby became the wholly owned subsidiary of the Company. As a result of the acquisition of ABS, the Company has abandoned its prior business plan and has changed its operations to the business of developing polymers comprising synthetic peptides intended to form gel-like barriers over wounds to stop or control bleeding and seal wounds. The Company is in the development stage and has generated no operating revenues to date. The Company is currently devoting substantially all of its efforts toward product research and development. Also in connection with the Merger, we relocated our principal office to Wellesley, Massachusetts.

ABS was incorporated under the laws of Commonwealth of Massachusetts on March 6, 2006 as Clear Nano Solutions, Inc. On April 7, 2008, ABS changed its name to Arch Therapeutics, Inc. Effective upon the closing of the Merger, ABS changed its name from Arch Therapeutics, Inc. to Arch Biosurgery, Inc.

The Company is in the development stage and is devoting substantially all of its efforts toward product research and development. The Company has incurred losses of $4,631,871 since inception. To date, the Company has principally raised capital through the issuance of debt, convertible debt and the sale of investment units consisting of common stock and warrants.

The Company expects to incur substantial expenses for the foreseeable future relating to the research, development and commercialization of its potential products. The Company does not have sufficient cash and cash equivalents to support its current operating plan. The Company will be required to raise additional capital, obtain alternative means of financial support, or both, in order to continue to fund operations. However, there can be no assurance that the Company will be successful in securing additional resources on terms acceptable to the Company, if at all. Therefore, there exists substantial doubt about the Company's ability to continue as a going concern. The consolidated financial statements do not include any adjustments related to the recoverability of assets that might be necessary despite this uncertainty.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Company is in the development stage and is devoting substantially all of its efforts to raising capital, developing technologies, establishing customer and vendor relationships, and recruiting new employees. Accordingly, the accompanying consolidated financial statements are presented under the development stage accounting provisions of the Financial Accounting Standards Board (FASB).

Use of Estimates

Management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the dates of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentration of credit risk consist primarily of cash and cash equivalents. The Company maintains its cash in bank deposits accounts, which, at times, may exceed federally insured limits. The Company has not experienced any losses in such accounts. The Company believes it is not exposed to any significant credit risk on cash and cash equivalents.

Property and Equipment

Property and equipment are recorded at cost and depreciated using the straight-line method over the estimated useful life of the related asset. Upon sale or retirement, the cost and accumulated depreciation are eliminated from their respective accounts, and the resulting gain or loss is included in income or loss for the period. Repair and maintenance expenditures are charged to expense as incurred.

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment when circumstances indicate the carrying value of an asset may not be recoverable in accordance with ASC 360, *Property, Plant and Equipment*. For assets that are to be held and used, impairment is recognized when the estimated undiscounted cash flows associated with the asset or group of assets is less than their carrying value. If impairment exists, an adjustment is made to write the asset down to its fair value, and a loss is recorded as the difference between the carrying value and fair value. Fair values are determined based on quoted market values, discounted cash flows or internal and external appraisals, as applicable. Assets to be disposed of are carried at the lower of carrying value or estimated net realizable value.

Convertible Debt

The Company records a discount to convertible notes for the intrinsic value of conversion options embedded in debt instruments based upon the differences between the fair value of the underlying preferred stock at the commitment date of the note transaction and the effective conversion price embedded in the note. Debt discounts under these arrangements are amortized to noncash interest expense using the effective interest rate method over the term of the related debt to their date of maturity. If a security or instrument becomes convertible only upon the occurrenc