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Registration No. 333-171411

PROSPECTUS SUPPLEMENT
(to Prospectus dated May 3, 2011)

$9,159,000

OCULUS
Innovative Sciences

COMMON STOCK

We have entered into an At-the-Market Issuance Sales Agreement, or sales agreement, with MLV & Co. LLC, or MLV, relating to the sale of shares of our common stock offered by this prospectus supplement and the accompanying prospectus. In accordance with the terms of the sales agreement, under this prospectus supplement and the accompanying prospectus, we may offer and sell shares of our common stock, $0.0001 par value per share, having an aggregate offering price of up to $9,159,000 from time to time through MLV, acting as agent.

Our common stock is quoted on The Nasdaq Capital Market under the symbol "OCLS." On April 1, 2014, the last reported sale price for our common stock was $4.04 per share. The aggregate market value of our outstanding voting and non-voting common equity held by non-affiliates on April 1, 2014 was $32,190,167 based on a stock price of $4.04. During the twelve calendar months prior to and including the date hereof, we have sold securities with an aggregate market value of $6,351,115 pursuant to General Instruction I.B.6. of Form S-3.

Sales of our common stock, if any, under this prospectus supplement and the accompanying prospectus may be made by any method permitted that is deemed to be an "at the market offering" as defined in Rule 415 promulgated under the Securities Act of 1933, as amended, or the Securities Act, including, without limitation, sales made directly on or through The Nasdaq Capital Market, or any other existing trading market for our common stock, sales made to or through a market maker other than on an exchange or otherwise, in certain negotiated transactions at market prices, and/or any other method permitted by law.

MLV is not required to sell any specific number or dollar amount of securities, but will act as our sales agent using commercially reasonable efforts consistent with its normal trading and sales practices, on mutually agreed terms between MLV and us. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

The compensation to MLV for sales of common stock sold pursuant to the sales agreement will be an amount equal to 3% of the aggregate gross proceeds of any shares of common stock sold under the sales agreement. In connection with the sale of the common stock on our behalf, MLV may be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of MLV may be deemed to be underwriting commissions or discounts. We have also agreed to provide indemnification and contribution to MLV with respect to certain civil liabilities, including liabilities under the Securities Act.

Investing in our securities involves a high degree of risk. Before buying any of our securities, you should carefully consider the risk factors described in "Risk Factors" beginning on page S-7 of this Prospectus Supplement.

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

MLV & Co

The date of this Prospectus Supplement is April 2, 2014.

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Prospectus Supplement

Prospectus

ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus are part of a "shelf" registration statement on Form S-3 that we filed with the Securities and Exchange Commission on February 18, 2011 and was declared effective on May 3, 2011.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus and the accompanying prospectus. The second part is the accompanying prospectus, which gives more general information about the shares of our common stock and other securities we may offer from time to time under our shelf registration statement, some of which does not apply to the securities offered by this prospectus supplement. To the extent there is a conflict between the information contained in this prospectus supplement, on the one hand, and the information contained in the accompanying prospectus or any document incorporated by reference therein, on the other hand, you should rely on the information in this prospectus supplement.

You should read this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus before making an investment decision. You should also read and consider the information in the documents referred to in the sections of this prospectus supplement entitled "Where You Can Find More Information" and "Incorporation of Certain Documents by Reference."

In this prospectus supplement and the accompanying prospectus, unless otherwise indicated, the terms "Oculus," "we," "us," "our," and similar terms refer to Oculus Innovative Sciences, Inc. and its subsidiaries on a consolidated basis.

PROSPECTUS SUPPLEMENT SUMMARY

This summary contains basic information about us and this offering. Because it is a summary, it does not contain all of the information that you should consider before investing. Before you decide to invest in our common stock, you should read this entire prospectus supplement and the accompanying prospectus carefully, including the section entitled "Risk Factors," and our consolidated financial statements and the related notes and other documents incorporated by reference in the accompanying prospectus.

OUR COMPANY

Our Business

We are a global healthcare company that designs, produces, and markets prescription and non-prescription products in 31 countries. We are pioneering innovative products for the dermatology, surgical, advanced wound and tissue care, and animal healthcare markets. Our primary focus is on the commercialization of our proprietary technology platform called Microcyn® Technology. This technology is based on electrically charged oxychlorine small molecules designed to target a wide range of organisms that cause disease (pathogens). These organisms include viruses, fungi, spores and antibiotic-resistant strains of bacteria, such as methicillin-resistant *Staphylococcus aureus*, or MRSA, and vancomycin-resistant *Enterococcus,* or VRE, as well as *Clostridium difficile,* or C. diff, a highly contagious bacteria spread by human contact. Several Microcyn® Technology tissue care products are designed to treat infections and enhance healing while reducing the need for antibiotics. Infection is a serious potential complication in both chronic and acute wounds, and controlling infection is a critical step in wound healing.

To date, we have obtained eight approvals or clearances from the U.S. Food and Drug Administration, or FDA, that permit us to sell our Microcyn-based products as medical devices under Section 510(k) of the Federal Food, Drug and Cosmetic Act in the United States. In December 2013, we announced that we had received our latest 510(k) device clearance from the FDA for our new Microcyn® Scar Management HydroGel. The Rx product, under the supervision of a healthcare professional, is intended for the management of old and new hypertrophic and keloid scarring resulting from burns, general surgical procedures and trauma wounds. Our U.S. dermatology partner, Quinnova Pharmaceuticals, Inc., intends to commercialize this product in the first half of 2014.

We do not have the necessary regulatory approvals to market Microcyn® as a drug or as a medical device with an antimicrobial or wound healing indication in the United States. Outside the United States, our Microcyn® Technology products have a CE Mark device approval in Europe for debriding, irrigating and moistening acute and chronic wounds in comprehensive wound treatment through potential local antimicrobial effect in the wound bed and creating a moist environment. In February 2014, we announced receipt of European CE Mark device approval for our Microcyn®-based GramaDerm® Solution and GramaDerm® Hydrogel. Both products are intended for use in the topical treatment of mild to moderate acne and are designed to complement other acne treatments. In Mexico, we are approved as a drug for antiseptic and were granted a Mexican patent for the use of our novel antimicrobial surgical solution in the treatment and prevention of peritonitis. In India, our technology has a drug license for cleaning and debriding in wound management. In China, we have obtained a medical device approval by the State Food and Drug Administration for reducing the propagation of microbes in wounds and creating a moist environment for wound healing.

While we do not have the necessary regulatory clearance for an antimicrobial or wound healing indication in the United States, several factors, including our global product experience, clinical and laboratory testing, physician-led clinical studies based on our technology and scientific papers authored about our technology, suggest that our Microcyn® Technology may help reduce a wide range of pathogens in acute and chronic wounds, while curing or improving infection, and concurrently enhancing wound healing through modes of action unrelated to the treatment of infection. These physician-led clinical studies suggest that our Microcyn® Technology is safe, easy to use and complementary to many existing treatment methods in wound care. Physician-led clinical studies and usage of our products in the United States suggest that our 510(k) cleared products may shorten hospital stays, lower aggregate patient care costs and, in certain cases, reduce the need for systemic antibiotics.

Ruthigen, Inc.

Our subsidiary, Ruthigen, Inc., was incorporated in the State of Nevada on January 18, 2013, and reincorporated from Nevada to Delaware on September 25, 2013. Ruthigen has established offices in Santa Rosa, California. Ruthigen announced its initial public offering on March 21, 2014. We own a minority stake in Ruthigen after its public offering.

On January 31, 2014, we amended certain agreements with Ruthigen. Previously, we had entered into three key agreements with Ruthigen. Each of these agreements (the "Ancillary Agreements") was entered into in the overall context of Ruthigen's separation from us (the "Separation"). The effective date for all three agreements is the closing date of Ruthigen's initial public offering, which was March 26, 2014.

Funding Agreement

On January 31, 2014, we entered into a new financing agreement with Ruthigen to govern the terms of certain additional financing to be provided to Ruthigen by us, pending the Separation, subject to the terms and conditions set forth in the agreement.

We agreed to continue to fund Ruthigen for a total of up to $760,000 to allow Ruthigen to proceed with its intended initial public offering. Furthermore, any funds provided by us to Ruthigen pursuant to the funding agreement will be repaid to us by Ruthigen at the time of the closing of the Ruthigen initial public offering. The funding agreement also contains provisions related to the composition of our board of directors. One of the Ruthigen board of director members resigned from our board of directors effective February 21, 2014, which was the date of the filing of Ruthigen's filing of Amendment No. 4 to its registration statement, while the remaining Ruthigen board of director members resigned from our board of directors on March 26, 2014, at the time Ruthigen's initial public offering closed.

License and Supply Agreement

We initially entered into a license and supply agreement with Ruthigen on June 6, 2013. Pursuant to the terms of the license and supply agreement, we agreed to exclusively license certain of our proprietary technology to Ruthigen to enable Ruthigen's research and development and commercialization of the newly discovered RUT58-60, and any improvements to it, in the United States, Canada, European Union and Japan, referred to as the Territory, for certain invasive procedures in humans as defined in the license and supply agreement. On October 9, 2013, we entered into Amendment No. 1 to the license and supply agreement with Ruthigen, which amended the second milestone event set forth in Section 7.1 of the license and supply agreement. On November 6, 2013, we entered into Amendment No. 2 to the license and supply agreement with Ruthigen to further amend the certain milestone events set forth in Section 7.1 of the license and supply agreement and to amend the terms of the manufacturing equipment purchases set forth in Section 6.13 of the license and supply agreement. On January 31, 2014, we entered into Amendment No. 3 to the license and supply agreement with Ruthigen to further amend certain milestone events and the terms of the manufacturing equipment purchases, and to remove sections of the license and supply agreement which related to an exclusive option granted by us to Ruthigen to expand the terms of the license and supply agreement to dermatologic uses. All other terms and conditions of the license and supply agreement remain unmodified and in full force and effect.

Under the terms of the license and supply agreement, we will be prohibited from using the licensed proprietary technology to sell products that compete with Ruthigen's products within the Territory, and Ruthigen cannot sell any device or product that competes with our products being sold or developed as of the effective date of the license and supply agreement.

Ruthigen will be required to make a total of $8,000,000 in milestone payments to us for the first product only, as follows: upon completion of last patient enrollment in Ruthigen's Phase 1/2 clinical study; upon completion of last patient enrollment in Ruthigen's first pivotal clinical study; upon completion of Ruthigen's first meeting with the U.S. Food and Drug Administration following completion of Ruthigen's first pivotal clinical trial; and upon first patient enrollment in Ruthigen's second pivotal clinical trial. In addition, as further consideration under the agreement, Ruthigen will be required to make royalty payments to us based on Ruthigen's annual net sales of the product from the date of first commercial sale to the date that Ruthigen ceases to commercialize the product, which percentage royalty rate will vary between 3% and 20% and will increase based on various net sales thresholds and will differ depending on the country in which the sales are made.

Shared Services Agreement

We also entered into a shared services agreement with Ruthigen initially on June 6, 2013, pursuant to which we will provide Ruthigen with general services, including general accounting, human resources, laboratory personnel and shared R&D resources while Ruthigen plans to establish an independent facility and systems. On January 31, 2014, we entered into Amendment No. 1 to the shared services agreement with Ruthigen to amend the terms of certain standard activities we shall provide Ruthigen and the terms related to access to our facilities. All other terms and conditions of the shared services agreement remain unmodified and in full force and effect.

Separation Agreement

Effectiveness and Term – On August 2, 2013, we entered into a separation agreement with Ruthigen that contains provisions relating to our ongoing relationship with Ruthigen, and more specifically governs our relationship with Ruthigen following the completion of Ruthigen's initial public offering. On January 31, 2014, we amended the separation agreement.

The separation agreement contains certain limitations on our ability to control various aspects of Ruthigen's business and operations in order for Ruthigen to operate as independently as possible from us to unlock the value proposition of RUT58-60, which Ruthigen expects to result in financial gain to us and Ruthigen, if Ruthigen is successful. The separation agreement terminates 8.5 years following the closing of Ruthigen's initial public offering, unless the parties mutually agree to terminate it earlier. However, most of the material restrictions and obligations contained in the separation agreement lapse when we and our subsidiaries (other than Ruthigen) own less than 19.9%, or the ownership threshold for purposes of the agreement, of the outstanding shares of Ruthigen's common stock.

Marketing and Transfer Restrictions – The separation agreement contains a series of restrictions on our ability to transfer the Ruthigen shares we own. We are restricted from transferring any of the Ruthigen shares we own during the one-year lock up period immediately following Ruthigen's initial public offering. Following the one-year lock up period, transfers by us of the Ruthigen shares we own must be conducted with the consent of Ruthigen's board of directors or within the prescribed requirements for such transfers set forth in the separation agreement. These prescribed requirements include that the transfers must be in private placement transactions, that the purchase price discount may not exceed 15% or 20% of the prevailing market price depending on the type of transferee, the amount of shares transferred in a given transfer (or series of transfers comprising a single transaction) may not exceed the greater of 5% of Ruthigen's outstanding shares or $1.5 million in net proceeds to us, as well as certain other requirements set forth in the separation agreement.

Registration Rights – The separation agreement provides us with certain "piggy back" registration rights if Ruthigen proposes to publicly register any of its common stock following the completion of Ruthigen's intended initial public offering, subject to certain conditions and limitations. The inclusion of the Ruthigen shares we own in such registration will be subject to the same terms that Ruthigen offers its own securities in such offering and our registration rights will never be never be more than 30% of the value of all securities to be registered in such offering. In addition, following transfers by us of the Ruthigen shares, we have certain demand registration rights requiring Ruthigen to register all of the Ruthigen shares we have transferred.

Standstill – We have agreed that, subject to the ownership threshold, we shall not, and shall not act in concert with any person to, make or participate in a solicitation of proxies or powers of attorney or similar rights to vote any of the Ruthigen shares we own or to deposit the Ruthigen shares we own in a voting trust.

Voting – We have agreed that, subject to the ownership threshold, we shall vote or consent all of the Ruthigen shares we own in the same manner as the majority of the minority holders of Ruthigen's common stock (non-Oculus holders).

Equity Plan, Oculus Equity and Corporate Governance – We and Ruthigen have agreed on the principal terms of Ruthigen's equity incentive plan, including the formula for the number of shares reserved under the plan, the vesting schedule of awards under the plan, timing, size and award type of the initial grants to be made following the closing of Ruthigen's intended initial public offering, and the formula for the evergreen refresh provision and other share caps on certain types of awards and future equity plans. The separation agreement clarifies that options for common stock of our Company held by employees and directors of Ruthigen shall continue to vest as long as the individuals continue in service to Ruthigen. In addition, the separation agreement provides that Ruthigen's restated articles of incorporation and bylaws for purposes of operating as a public company will contain provisions for a staggered board of directors and plurality voting for the election of directors.

Indemnification – The separation agreement provides that each party will indemnify, defend and hold harmless the other party and its affiliates for third party claims asserted against the other party, and that we will indemnify, defend and hold harmless Ruthigen and its affiliates from and against any and all direct losses relating to the WTI loan agreements.

Directors' and Officers' Insurance – The separation agreement provides that, so long as we shall maintain a directors' and officers' insurance program covering the past and present officers and directors of our Company, the program shall be standard in our industry and if there is a change to the program, then we shall provide prior notice. In addition, we have agreed not to exclude any former Oculus director from any insurance policy coverage if such coverage is made available to our Company's then existing directors and officers.

Corporate Information

We incorporated under the laws of the State of California in April 1999 as Micromed Laboratories, Inc. In August 2001, we changed our name to Oculus Innovative Sciences, Inc. In December 2006, we reincorporated under the laws of the State of Delaware. Our principal executive offices are located at 1129 N. McDowell Blvd., Petaluma, California, 94954, and our telephone number is (707) 283-0550. We have three principal subsidiaries: Ruthigen, Inc., organized in Delaware; Oculus Technologies of Mexico, S.A. de C.V., organized in Mexico; and Oculus Innovative Sciences Netherlands, B.V., organized in the Netherlands. References to our Company contained herein include our wholly owned subsidiary, Ruthigen, Inc., except where the context otherwise requires. Our fiscal year end is March 31. Our website is www.oculusis.com. Information contained on our website does not constitute part of this prospectus.

Additional Information

Investors and others should note that we announce material financial information using our company website (www.oculusis.com), our investor relations website (ir.oculusis.com), SEC filings, press releases, public conference calls and webcasts. Information about Oculus, our business, and our results of operations may also be announced by posts on the following social media channels:

- Oculus corporate blog (http://oculusis.com/dialogue/)
- Oculus Facebook page (www.facebook.com/oculusinnovativesciences)
- Dan McFadden's Twitter feed (http://twitter.com/dmcfaddenocls). Mr. McFadden is the Vice President of Public and Investor Relations of our Company.

The information that we post on these social media channels could be deemed to be material information. Therefore, we encourage investors, the media, and others interested in Oculus to review the information that we post on these social media channels. These social media channels may be updated from time to time on Oculus' investor relations website. The information on or accessible through our websites and social media channels is not incorporated by reference in this prospectus.

THE OFFERING

Common stock offered by us	Shares of our common stock having an aggregate offering price of up to $9,159,000.
Manner of offering	"At the market offering" that may be made from time to time on the Nasdaq Capital Market or other market for our common stock in the United States through our agent, MLV & Co. LLC. See "Plan of Distribution" on page S-25 of this prospectus supplement.
Use of proceeds	We intend to use the net proceeds from this offering for working capital and general corporate purposes. See "Use of Proceeds" on page S-24 of this prospectus supplement.
Risk factors	This investment involves a high degree of risk. See "Risk Factors" on page S-7 of this prospectus supplement for factors to consider before deciding to purchase our securities.
Nasdaq Capital Market symbol	OCLS

RISK FACTORS

Risks Related to Our Business

We have a history of losses, we expect to continue to incur losses and we may never achieve profitability.

We reported a net loss of $3,722,000 for the nine months ended December 31, 2013. We incurred net losses of $5,431,000 and $7,329,000 for the years ended March 31, 2013 and 2012, respectively. At December 31, 2013, our accumulated deficit amounted to $141,467,000 and at March 31, 2013, our accumulated deficit amounted to $137,745,000. During the nine months ended December 31, 2013, net cash used in operating activities was $3,401,000, and during the year ended March 31, 2013, net cash provided by operating activities amounted to $1,150,000. We had working capital of $2,573,000 as of December 31, 2013. We expect to continue incurring losses for the foreseeable future and may never achieve or sustain profitability. We may need to raise additional capital to pursue product development initiatives and to penetrate markets for the sale of our products. We believe that we have access to capital resources through possible public or private equity offerings, debt financings, corporate collaborations or other means. If we are unable to secure additional capital, we may be required to curtail our research and development initiatives and take additional measures to reduce costs in order to conserve our cash in amounts sufficient to sustain operations and meet our obligations. These measures could cause significant delays in our efforts to commercialize our products in the United States, which are critical to the realization of our business plan and to future operations.

If we are unable to maintain compliance with the continued listing standards as set forth in the Nasdaq Listing Rules, our common stock could be delisted from The Nasdaq Capital Market, and if this were to occur, then the price and liquidity of our common stock, and our ability to raise additional capital may be adversely affected.

Our common stock is currently listed on The Nasdaq Capital Market. Continued listing of a security on The Nasdaq Capital Market is conditioned upon compliance with certain continued listing requirements and continued listing standards set forth in the Nasdaq Listing Rules for Nasdaq Capital Market companies. There can be no assurance we will continue to satisfy the requirements for maintaining a Nasdaq Capital Market listing.

As previously announced, on November 22, 2013, we received a letter from the Listing Qualifications staff of The Nasdaq Stock Market LLC, notifying us that we were not in compliance with Nasdaq Listing Rule 5550(b)(1), which requires us to maintain a minimum of $2,500,000 in stockholders' equity for continued listing on the Nasdaq Capital Market. As of September 30, 2013, we had stockholders' equity of $1,550,000, as reported in our Quarterly Report on Form 10-Q for the quarter ended September 30, 2013, filed by us with the Securities and Exchange Commission on November 19, 2013. The letter also noted that, as of November 21, 2013, we did not meet the compliance alternative requirement of market value of listed securities under Listing Rule 5550(b)(2), or the compliance alternative requirement of net income from continuing operations under Listing Rule 5550(b)(3).

On December 9, 2013, we announced two transactions that increased our stockholders' equity. We closed on a registered direct offering of 550,000 shares of common stock at $4.00 per share, with no warrant coverage, yielding gross proceeds of $2.2 million. This transaction resulted in an increase to our stockholders' equity of $2 million.

The second transaction involved the sale of 617,285 shares of our common stock by our lenders, Venture Lending and Leasing V, LLC and Venture Lending and Leasing VI, LLC (collectively with Venture Lending and Leasing V, LLC, "VLL"). On October 30, 2012, we entered into a stock purchase agreement with VLL for the issuance of shares of common stock having an aggregate fair market value equal to $3,500,000 and subsequently issued an aggregate of 617,285 shares to VLL. The use of proceeds from the sale of the shares pursuant to the stock purchase agreement was intended to be used to eliminate our put warrants liabilities under certain warrants held by VLL and to eliminate or reduce outstanding debt payments owed by us under certain loans outstanding with VLL. As of December 16, 2013, VLL sold all of its shares of our stock acquired in the October 2012 transaction at an average price of about $5.35 per share. The net proceeds of the shares will be applied to the put warrant liabilities of those certain warrants held by VLL, and will also prepay the remaining balance of principal and interest owed by us under those certain loan agreements with VLL. The net result of this transaction is intended to increase our stockholders' equity by $1 million.

As of December 31, 2013, we had stockholders' equity of $3,397,000, as reported in our Quarterly Report on Form 10-Q for the quarter ended December 31, 2013, filed by us with the Securities and Exchange Commission on February 14, 2014.

If we are not able to maintain compliance with the continued listing standards as set forth in the Nasdaq Listing Rules for Nasdaq Capital Market companies, our common stock will be delisted from The Nasdaq Capital Market and an associated decrease in liquidity in the market for our common stock may occur. In addition, the delisting of our common stock could materially adversely affect our access to the capital markets, and any limitation on liquidity or reduction in the price of our common stock could materially adversely affect our ability to raise capital on terms acceptable to us or at all. Delisting from The Nasdaq Capital Market could also result in the potential loss of confidence by our business partners and suppliers, the loss of institutional investor interest and fewer business development opportunities.

Our strategy to separate our businesses into two publicly traded companies may have a negative impact on our business operations, operating results and assets.

On March 26, 2014, our subsidiary, Ruthigen, Inc. closed its initial public offering. As a result, we now own a minority interest in Ruthigen. There are various uncertainties and risks relating to this separation that could have, and in some cases have had, a negative impact on our business operations, operating results or assets, including: (i) the distraction of management and disruption of operations; (ii) perceived uncertainties as to our future direction may result in increased difficulties in recruiting and retaining employees, particularly highly qualified employees; (iii) perceived uncertainties as to our future direction may have a negative impact on our relationships with our customers, suppliers, vendors and partners and may result in the loss of business opportunities; (iv) the process of completing the separation may be time consuming and expensive and may result in the loss of business opportunities; and (v) we may not be able to successfully achieve the benefits of any strategic alternative undertaken by us.

Our inability to raise additional capital on acceptable terms in the future may cause us to curtail certain operational activities, including regulatory trials, sales and marketing, and international operations, in order to reduce costs and sustain the business, and such inability would have a material adverse effect on our business and financial condition.

We expect capital outlays and operating expenditures to increase over the next several years as we work to conduct regulatory trials, commercialize our products and expand our infrastructure. We may need to raise additional capital in order to, among other things:

- fund our clinical trials and preclinical studies;
- sustain commercialization of our current products or new products;
- expand our manufacturing capabilities;
- increase our sales and marketing efforts to drive market adoption and address competitive developments;
- acquire or license technologies;
- finance capital expenditures and our general and administrative expenses; and
- develop new products.

Our present and future funding requirements will depend on many factors, including:

- the progress and timing of our clinical trials;
- the level of research and development investment required to maintain and improve our technology position;
- cost of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights;
- our efforts to acquire or license complementary technologies or acquire complementary businesses;
- changes in product development plans needed to address any difficulties in commercialization;
- competing technological and market developments; and
- changes in regulatory policies or laws that affect our operations.

If we raise additional funds by issuing equity securities, dilution to our stockholders will result. Any equity securities issued also may provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise additional funds by issuing debt securities, these debt securities would have rights, preferences and privileges senior to those of holders of our common stock, and the terms of the debt securities issued could impose significant restrictions on our operations. If we raise additional funds through collaborations or licensing arrangements, we might be required to relinquish significant rights to our technologies or products, or grant licenses on terms that are not favorable to us. A failure to obtain adequate funds may cause us to curtail certain operational activities, including regulatory trials, sales and marketing, and international operations, in order to reduce costs and sustain our business, and would have a material adverse effect on our business and financial condition.

We do not have the necessary regulatory approvals to market Microcyn® as a drug in the United States.

To date, we have obtained eight approvals or clearances from the FDA that permit us to sell our Microcyn-based products as medical devices under Section 510(k) of the Federal Food, Drug and Cosmetic Act in the United States. In December 2013, we announced that we had received our latest 510(k) device clearance from the FDA for our new Microcyn® Scar Management HydroGel. Before we are permitted to sell Microcyn® as a drug in the United States, we must, among other things, successfully complete additional preclinical studies and well-controlled clinical trials, submit a new drug application to the FDA and obtain FDA approval.

The FDA approval process is expensive and uncertain, requires detailed and comprehensive scientific and other data and generally takes several years. Despite the time and expense exerted, approval is never guaranteed. Even if we obtain FDA approval to sell Microcyn® as a drug, we may not be able to successfully commercialize Microcyn as a drug in the United States and may never recover the substantial costs we have invested in the development of our Microcyn-based products.

Delays or adverse results in clinical trials could result in increased costs to us and could delay our ability to generate revenue.

Clinical trials can be long and expensive, and the outcome of clinical trials is uncertain and subject to delays. It may take several years to complete clinical trials, if at all, and a product candidate may fail at any stage of the clinical trial process. The length of time required varies substantially according to the type, complexity, novelty and intended use of the product candidate. Interim results of a preclinical study or clinical trial do not necessarily predict final results, and acceptable results in preclinical studies or early clinical trials may not be repeatable in later subsequent clinical trials. The commencement or completion of any of our clinical trials may be delayed or halted for a variety of reasons, including the following:

- insufficient funds to continue our clinical trials;
- changes in the FDA requirements for approval, including requirements for testing efficacy and safety;
- delay in obtaining or failure to obtain FDA or other regulatory authority approval of a clinical trial protocol;
- patients not enrolling in clinical trials at the rate we expect;
- delays in reaching agreement on acceptable clinical trial agreement terms with prospective sites;
- delays in obtaining institutional review board approval to conduct a study at a prospective site;
- third party clinical investigators not performing our clinical trials on our anticipated schedule or performance is not consistent with the clinical trial protocol and good clinical practices, or the third party organizations not performing data collection and analysis in a timely or accurate manner; and
- changes in governmental regulations or administrative actions.

We do not know whether future clinical trials will demonstrate safety and efficacy sufficiently to result in additional FDA approvals or clearances. While a number of physicians have conducted clinical studies assessing the safety and efficacy of Microcyn® for various indications, the data from these studies are not sufficient to support approval of Microcyn® as a drug in the United States.

Clinical trials involve a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

The results of preclinical studies and early clinical trials of new drugs do not necessarily predict the results of later-stage clinical trials. The design of our clinical trials is based on many assumptions about the expected effects of our product candidates, and if those assumptions are incorrect, the trials may not produce statistically significant results. Preliminary results may not be confirmed upon full analysis of the detailed results of an early clinical trial. Product candidates in later stages of clinical trials may fail to show safety and efficacy sufficient to support intended use claims despite having progressed through initial clinical testing. The data collected from clinical trials of our product candidates may not be sufficient to obtain regulatory approval in the United States or elsewhere. Because of the uncertainties associated with drug development and regulatory approval, we cannot determine if or when we will have an approved product for commercialization or achieve sales or profits.

If we fail to obtain, or experience significant delays in obtaining, additional regulatory clearances or approvals to market our current or future products, we may be unable to commercialize these products.

The developing, testing, manufacturing, marketing and selling of medical technology products are subject to extensive regulation by numerous governmental authorities in the United States and other countries. The process of obtaining regulatory clearance and approval of medical technology products is costly and time consuming. Even though their underlying product formulations may be the same or similar, our products are subject to different regulations and approval processes depending upon their intended use.

To obtain regulatory approval of our products as drugs in the United States, we must first show that our products are safe and effective for target indications through preclinical studies (laboratory and animal testing) and clinical trials (human testing). The FDA generally clears marketing of a medical device through the 510(k) pre-market clearance process if it is demonstrated the new product has the same intended use and the same or similar technological characteristics as another legally marketed Class II device, such as a device already cleared by the FDA through the 510(k) premarket notification process, and otherwise meets the FDA's requirements. Product modifications, including labeling the product for a new intended use, may require the submission of a new 510(k) clearance and FDA approval before the modified product can be marketed.

The outcomes of clinical trials are inherently uncertain. In addition, we do not know whether the necessary approvals or clearances will be granted or delayed for future products. The FDA could request additional information, changes to product formulation(s) or clinical testing that could adversely affect the time to market and sale of products as drugs. If we do not obtain the requisite regulatory clearances and approvals, we will be unable to commercialize our products as drugs or devices and may never recover any of the substantial costs we have invested in the development of Microcyn®.

Distribution of our products outside the United States is subject to extensive government regulation. These regulations, including the requirements for approvals or clearance to market, the time required for regulatory review and the sanctions imposed for violations, vary from country to country. We do not know whether we will obtain regulatory approvals in such countries or that we will not be required to incur significant costs in obtaining or maintaining these regulatory approvals. In addition, the export by us of certain of our products that have not yet been cleared for domestic commercial distribution may be subject to FDA export restrictions. Failure to obtain necessary regulatory approvals, the restriction, suspension or revocation of existing approvals or any other failure to comply with regulatory requirements would have a material adverse effect on our future business, financial condition, and results of operations.

We have established a nutritional products division under the name NVN Therapeutics, and if the products we create in our new division are not accepted by the marketplace, we may cease operations in this division.

We established a nutritional products division under the name Napa Valley Nutritionals in the beginning of 2012 to expand our product pipeline. The name of the division was subsequently changed to NVN Therapeutics and is currently based out of Sacramento, California. This division was originally intended to develop and manufacture medical foods with a primary focus on the women's healthcare market. However, as a result of recently revised FDA guidance regarding medical foods, we have ceased production of medical foods and we are redirecting our efforts into the development and manufacture of dietary supplements for this same women's healthcare market. If we cannot generate sufficient revenues from the sale of such products, we may cease operations in this nutritional products division.

If our products do not gain market acceptance, our business will suffer because we might not be able to fund future operations.

A number of factors may affect the market acceptance of our products or any other products we develop or acquire, including, among others:

- the price of our products relative to other products for the same or similar treatments;
- the perception by patients, physicians and other members of the health care community of the effectiveness and safety of our products for their indicated applications and treatments;
- changes in practice guidelines and the standard of care for the targeted indication;
- our ability to fund our sales and marketing efforts; and
- the effectiveness of our sales and marketing efforts or our partners' sales and marketing efforts.

Our ability to effectively promote and sell any approved products will also depend on pricing and cost-effectiveness, including our ability to produce a product at a competitive price and our ability to obtain sufficient third-party coverage or reimbursement, if any. In addition, our efforts to educate the medical community on the benefits of our product candidates may require significant resources, may be constrained by FDA rules and policies on product promotion, and may never be successful. If our products do not gain market acceptance, we may not be able to fund future operations, including developing, testing and obtaining regulatory approval for new product candidates and expanding our sales and marketing efforts for our approved products, which would cause our business to suffer.

If our competitors develop products similar to Microcyn®, we may need to modify or alter our business strategy, which may delay the achievement of our goals.

Competitors may develop products with similar characteristics to Microcyn®. Such similar products marketed by larger competitors can hinder our efforts to penetrate the market. As a result, we may be forced to modify or alter our business and regulatory strategy and sales and marketing plans, as a response to changes in the market, competition and technology limitations, among others. Such modifications may pose additional delays in achieving our goals.

We intend to license or collaborate with third parties in various potential markets, or in some cases we may utilize a small direct sales force, and events involving these strategic partners or any future collaboration could delay or prevent us from developing or commercializing products.

Our business strategy and our short- and long-term operating results will depend in part on our ability to execute on existing strategic collaborations and to license or partner with new strategic partners. We believe collaborations allow us to leverage our resources and technologies and to access markets that are compatible with our own core areas of expertise while avoiding the cost of establishing or maintaining a direct sales force. We may incur significant costs in the use of third parties to identify and assist in establishing relationships with potential collaborators. We currently have a small direct sales force which sells our products in the wound care and women's health markets, and we intend to slowly expand the geographical coverage of our direct sales force.

To penetrate our target markets, we may need to enter into additional collaborative agreements to assist in the development and commercialization of products, or in some cases, we intend to create a direct sales force to sell into certain core markets. In some of our markets, we are using a direct sales force to sell our products, while in other markets we are working with partners or distributors to commercialize our products. Utilizing a direct sales force requires more cash flow upfront to hire a sales force in comparison to partnering with a company, which uses its already established sales force. On the other hand, establishing strategic collaborations is difficult and time-consuming. Potential collaborators may reject collaborations based upon their assessment of our financial, regulatory or intellectual property position and our internal capabilities. Our discussions with potential collaborators may not lead to the establishment of new collaborations on favorable terms and may have the potential to provide collaborators with access to our key intellectual property filings and next generation formations. We have limited control over the amount and timing of resources that our current collaborators or any future collaborators devote to our collaborations or potential products. These collaborators may breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully and in a timely manner. Further, our collaborators may not develop or commercialize products that arise out of our collaborative arrangements or devote sufficient resources to the development, manufacture, marketing or sale of these products. By entering into collaboration, we may preclude opportunities to collaborate with other third parties who do not wish to associate with our existing third party strategic partners. Moreover, in the event of termination of a collaboration agreement, termination negotiations may result in less favorable terms.

If we are unable to expand our direct domestic sales force, we may not be able to successfully increase the sales of our products in the United States.

We currently use a direct sales force to sell our products in the wound care and women's health markets, while we have established partnerships to commercialize our products in the animal healthcare and dermatology markets. Expanding our sales force is expensive and time consuming, and the lack of qualified sales personnel could delay or limit the success of our product launches in the United States. Our domestic sales force competes with the sales operations of our competitors, which are better funded, larger and more experienced. We may not be able to develop domestic sales capacity on a timely basis, or at all.

Our dependence on distributors for sales could limit or prevent us from selling our products and from realizing long-term revenue growth.

We currently depend on distributors to sell Microcyn® in Europe and other countries, and intend to continue to sell our products primarily through distributors in Europe for the foreseeable future. Our existing distribution agreements are generally short-term in duration, and we may need to pursue alternate partners if the other parties to these agreements terminate or elect not to renew their agreements. If we are unable to retain our current distributors for any reason, we must replace them with alternate distributors experienced in supplying the wound care market and our other markets, which could be time-consuming and divert management's attention from other operational matters. In addition, we will need to attract additional distributors to expand our the geographic areas in which we sell Microcyn®. Distributors may not commit the necessary resources to market and sell our products to the level of our expectations, which could harm our ability to generate revenues. In addition, some of our distributors may also sell products that compete with ours. In some countries, regulatory licenses must be held by residents of the country. For example, the regulatory approval for one of our products in India is owned and held by our Indian distributor. If the licenses are not in our name or under our control, we might not have the power to ensure their ongoing effectiveness and use by us. If current or future distributors do not perform adequately, or we are unable to locate distributors in particular geographic areas, we may not realize long-term revenue growth.

If we fail to comply with ongoing regulatory requirements, or if we experience unanticipated problems with our products, these products could be subject to restrictions or withdrawal from the market.

Regulatory approvals or clearances that we currently have and that we may receive in the future are subject to limitations on the indicated uses for which the products may be marketed, and any future approvals could contain requirements for potentially costly post-marketing follow-up studies. If the FDA determines that our promotional materials or activities constitute promotion of an unapproved use or we otherwise fail to comply with FDA regulations, we may be subject to regulatory enforcement actions, including warning letters, injunctions, seizures, civil fines or criminal penalties. In addition, the manufacturing, labeling, packaging, adverse event reporting, storing, advertising, promoting, distributing and record-keeping for approved products are subject to extensive regulation. Our manufacturing facilities, processes and specifications are subject to periodic inspection by the FDA, European and other regulatory authorities and from time to time, we may receive notices of deficiencies from these agencies as a result of such inspections. Our failure to continue to meet regulatory standards or to remedy any deficiencies could result in restrictions being imposed on our products or manufacturing processes, fines, suspension or loss of regulatory approvals or clearances, product recalls, termination of distribution, product seizures or the need to invest substantial resources to comply with various existing and new requirements. In the more egregious cases, criminal sanctions, civil penalties, disgorgement of profits or closure of our manufacturing facilities are possible. The subsequent discovery of previously unknown problems with Microcyn®, including adverse events of unanticipated severity or frequency, may result in restrictions on the marketing of our products, and could include voluntary or mandatory recall or withdrawal of products from the market.

New government regulations may be enacted and changes in FDA policies and regulations and, their interpretation and enforcement, could prevent or delay regulatory approval of our products. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or abroad. Therefore, we do not know whether we will be able to continue to comply with any regulations or that the costs of such compliance will not have a material adverse effect on our future business, financial condition, and results of operations. If we are not able to maintain regulatory compliance, we will not be permitted to market our products and our business would suffer.

We may experience difficulties in manufacturing Microcyn®, which could prevent us from commercializing one or more of our products.

The machines used to manufacture our Microcyn-based products are complex, use complicated software and must be monitored by highly trained engineers. Slight deviations anywhere in our manufacturing process, including quality control, labeling and packaging, could lead to a failure to meet the specifications required by the FDA, the Environmental Protection Agency, European Notified Bodies, Mexican regulatory agencies and other foreign regulatory bodies, which may result in lot failures or product recalls. If we are unable to obtain quality internal and external components, mechanical and electrical parts, if our software contains defects or is corrupted, or if we are unable to attract and retain qualified technicians to manufacture our products, our manufacturing output of Microcyn®, or any other product candidate based on our platform that we may develop, could fail to meet required standards, our regulatory approvals could be delayed, denied or revoked, and commercialization of one or more of our Microcyn-based products may be delayed or foregone. Manufacturing processes that are used to produce the smaller quantities of Microcyn® needed for clinical tests and current commercial sales may not be successfully scaled up to allow production of significant commercial quantities. Any failure to manufacture our products to required standards on a commercial scale could result in reduced revenues, delays in generating revenue and increased costs.

Our competitive position depends on our ability to protect our intellectual property and our proprietary technologies.

Our ability to compete and to achieve and maintain profitability depends on our ability to protect our intellectual property and proprietary technologies. We currently rely on a combination of patents, patent applications, trademarks, trade secret laws, confidentiality agreements, license agreements and invention assignment agreements to protect our intellectual property rights. We also rely upon unpatented know-how and continuing technological innovation to develop and maintain our competitive position. These measures may not be adequate to safeguard our Microcyn® Technology.

We also have agreed to certain prohibitions on our intellectual property. Pursuant to a license and supply agreement, as subsequently amended, we entered into with our wholly owned subsidiary, Ruthigen, Inc., we agreed to exclusively license certain of our proprietary technology to Ruthigen to enable Ruthigen's research and development and commercialization of the newly discovered RUT58-60, and any improvements to it, in the United States, Canada, European Union and Japan for certain invasive procedures in humans as defined in the license and supply agreement,as amended. Under the terms of the license and supply agreement, as amended, we are also prohibited from using the licensed proprietary technology to sell products that compete with Ruthigen's products within the defined territory, and Ruthigen cannot sell any device or product that competes with our products being sold or developed as of the effective date of the license and supply agreement. Such agreement will take effect as of the closing date of Ruthigen's proposed initial public offering, if any should occur. If we do not protect our rights adequately, third parties could use our technology, and our ability to compete in the market would be reduced.

Although we have filed several U.S. and foreign patent applications related to our Microcyn-based products, the manufacturing technology for making the products, and their uses, only five U.S. patents have been issued from these applications to date.

Our pending patent applications and any patent applications we may file in the future may not result in issued patents, and we do not know whether any of our in-licensed patents or any additional patents that might ultimately be issued by the U.S. Patent and Trademark Office or foreign regulatory body will protect our Microcyn® Technology. Any claims that are issued may not be sufficiently broad to prevent third parties from producing competing substitutes and may be infringed, designed around, or invalidated by third parties. Even issued patents may later be found to be invalid, or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. For example, our European patent that was initially issued on May 30, 2007 was revoked by the Opposition Division of the European Patent Office in December 2009 following opposition proceedings instituted by a competitor.

The degree of future protection for our proprietary rights is more uncertain in part because legal means afford only limited protection and may not adequately protect our rights, and we will not be able to ensure that:

- we were the first to invent the inventions described in patent applications;
- we were the first to file patent applications for inventions;
- others will not independently develop similar or alternative technologies or duplicate our products without infringing our intellectual property rights;
- any patents licensed or issued to us will provide us with any competitive advantages;
- we will develop proprietary technologies that are patentable; or
- the patents of others will not have an adverse effect on our ability to do business.

The policies we use to protect our trade secrets may not be effective in preventing misappropriation of our trade secrets by others. In addition, confidentiality and invention assignment agreements executed by our employees, consultants and advisors may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosures. We cannot be certain that the steps we have taken will prevent the misappropriation and use of our intellectual property in the United States, or in foreign countries where the laws may not protect our proprietary rights as fully as in the United States.

We may face intellectual property infringement claims that could be time-consuming, costly to defend and could result in our loss of significant rights and, in the case of patent infringement claims, the assessment of treble damages.

On occasion, we may receive notices of claims of infringement, misappropriation or misuse of other parties' proprietary rights. We may have disputes regarding intellectual property rights with the parties that have licensed those rights to us. We may also initiate claims to defend our intellectual property. Intellectual property litigation, regardless of its outcome, is expensive and time-consuming, and could divert management's attention from our business and have a material negative effect on our business, operating results or financial condition. In addition, the outcome of such litigation may be unpredictable. If there is a successful claim of infringement against us, we may be required to pay substantial damages (including treble damages if we were to be found to have willfully infringed a third party's patent) to the party claiming infringement, develop non-infringing technology, stop selling our products or using technology that contains the allegedly infringing intellectual property or enter into royalty or license agreements that may not be available on acceptable or commercially practical terms, if at all. Our failure to develop non-infringing technologies or license the proprietary rights on a timely basis could harm our business. In addition, modifying our products to exclude infringing technologies could require us to seek re-approval or clearance from various regulatory bodies for our products, which would be costly and time consuming. Also, we may be unaware of pending patent applications that relate to our technology. Parties making infringement claims on future issued patents may be able to obtain an injunction that would prevent us from selling our products or using technology that contains the allegedly infringing intellectual property, which could harm our business.

Our ability to generate revenue will be diminished if we are unable to obtain acceptable prices or an adequate level of reimbursement from third-party payors of healthcare costs.

The continuing efforts of governmental and other third-party payors, including managed care organizations such as health maintenance organizations, or HMOs, to contain or reduce costs of health care may affect our future revenue and profitability, and the future revenue and profitability of our potential customers, suppliers and collaborative or license partners and the availability of capital. For example, in certain foreign markets, pricing or profitability of prescription pharmaceuticals is subject to government control. In the United States, governmental and private payors have limited the growth of health care costs through price regulation or controls, competitive pricing programs and drug rebate programs. Our ability to commercialize our products successfully will depend in part on the extent to which appropriate coverage and reimbursement levels for the cost of our Microcyn® products and related treatment are obtained from governmental authorities, private health insurers and other organizations, such as HMOs.

There is significant uncertainty concerning third-party coverage and reimbursement of newly approved medical products and drugs. Third-party payors are increasingly challenging the prices charged for medical products and services. Also, the trend toward managed healthcare in the United States and the concurrent growth of organizations such as HMOs, as well as legislative proposals to reform healthcare or reduce government insurance programs, may result in lower prices for or rejection of our products. The cost containment measures that health care payors and providers are instituting and the effect of any health care reform could materially and adversely affect our ability to generate revenues.

In addition, given ongoing federal and state government initiatives directed at lowering the total cost of health care, the United States Congress and state legislatures will likely continue to focus on health care reform, lowering the cost of prescription pharmaceuticals and Medicare and Medicaid payment systems reform. While we cannot predict whether any proposed cost-containment measures will be adopted, the announcement or adoption of these proposals could reduce the price that we receive for our Microcyn® products in the future.

We could be required to indemnify third parties for alleged infringement, which could cause us to incur significant costs.

Some of our distribution agreements contain commitments to indemnify our distributors against liability arising from infringement of third party intellectual property such as patents. We may be required to indemnify our customers for claims made against them or contribute to license fees they are required to pay. If we are forced to indemnify for claims or to pay license fees, our business and financial condition could be substantially harmed.

A significant part of our business is conducted outside of the United States, exposing us to additional risks that may not exist in the United States, which in turn could cause our business and operating results to suffer.

We have material international operations in Mexico and Europe. During the years ended March 31, 2013 and 2012, approximately 50% and 56% of our total revenues were generated from sales outside of the United States. Our business is highly regulated for the use, marketing and manufacturing of our Microcyn-based products both domestically and internationally. Our international operations are subject to risks, including:

- local political or economic instability;
- changes in governmental regulation;
- changes in import/export duties;
- trade restrictions;
- lack of experience in foreign markets;
- difficulties and costs of staffing and managing operations in certain foreign countries;
- work stoppages or other changes in labor conditions;
- difficulties in collecting accounts receivables on a timely basis or at all; and
- adverse tax consequences or overlapping tax structures.

We plan to continue to market and sell our products internationally to respond to customer requirements and market opportunities. We currently have international manufacturing facilities in Mexico and the United States. Establishing operations in any foreign country or region presents risks such as those described above as well as risks specific to the particular country or region. In addition, until a payment history is established over time with customers in a new geographic area or region, the likelihood of collecting receivables generated by such operations could be less than our expectations. As a result, there is a greater risk that the reserves set with respect to the collection of such receivables may be inadequate. If our operations in any foreign country are unsuccessful, we could incur significant losses and we may not achieve profitability.

In addition, changes in policies or laws of the United States or foreign governments resulting in, among other things, changes in regulations and the approval process, higher taxation, currency conversion limitations, restrictions on fund transfers or the expropriation of private enterprises, could reduce the anticipated benefits of our international expansion. If we fail to realize the anticipated revenue growth of our future international operations, our business and operating results could suffer.

Our sales in international markets subject us to foreign currency exchange and other risks and costs which could harm our business.

A substantial portion of our revenues are derived from outside the United States; primarily from Mexico and Europe. We anticipate that revenues from international customers will continue to represent a substantial portion of our revenues for the foreseeable future. Because we generate revenues in foreign currencies, we are subject to the effects of exchange rate fluctuations. The functional currency of our Mexican subsidiary is the Mexican Peso and the functional currency of our Netherlands subsidiary is the Euro. For the preparation of our consolidated financial statements, the financial results of our foreign subsidiaries are translated into U.S. dollars using average exchange rates during the applicable period. If the U.S. dollar appreciates against the Mexican Peso or the Euro, as applicable, the revenues we recognize from sales by our subsidiaries will be adversely impacted. Foreign exchange gains or losses as a result of exchange rate fluctuations in any given period could harm our operating results and negatively impact our revenues. Additionally, if the effective price of our products were to increase as a result of fluctuations in foreign currency exchange rates, demand for our products could decline and adversely affect our results of operations and financial condition.

We rely on a number of key customers who may not consistently purchase our products in the future and if we lose any one of these customers, our revenues may decline.

Although we have a significant number of customers in each of the geographic markets that we operate in, we rely on certain key customers for a significant portion of our revenues. For the nine months ended December 31, 2013, one customer represented 37%, one customer represented 25%, and one customer represented 10% of net revenue. During the year ended March 31, 2013, one customer represented 25%, and one customer represented 13%, respectively, of net revenues. During the year ended March 31, 2012, one customer represented 26% of net revenues. In the future, a small number of customers may continue to represent a significant portion of our total revenues in any given period. These customers may not consistently purchase our products at a particular rate over any subsequent period. The loss of any of these customers could adversely affect our revenues.

Negative economic conditions increase the risk that we could suffer unrecoverable losses on our customers' accounts receivable which would adversely affect our financial results.

We grant credit to our business customers, which are primarily located in Mexico, Europe and the United States. Collateral is generally not required for trade receivables. We maintain allowances for potential credit losses. At December 31, 2013, one customer represented 43%, one customer represented 21%, and one customer represented 13% of the net accounts receivable balance. At March 31, 2013, one customer represented 34%, one customer represented 26%, and one customer represented 15% of the net accounts receivable balance. At March 31, 2012, one customer represented 13% and two customers each represented 12% of the net accounts receivable balance. While we believe we have a varied customer base and have experienced strong collections in the past, if current economic conditions disproportionately impact any one of our key customers, including reductions in their purchasing commitments to us or their ability to pay their obligations, it could have a material adverse effect on our revenues and liquidity. We have not purchased insurance on our accounts receivable balances.

The loss of key members of our senior management team, one of our directors or our inability to retain highly skilled scientists, technicians and salespeople could adversely affect our business.

Our success depends largely on the skills, experience and performance of key members of our executive management team, including Jim Schutz, our Chief Executive Officer; and Robert Northey, our Vice President of Research and Development. The efforts of these people will be critical to us as we continue to develop our products and attempt to commercialize products in the wound and skin care markets. If we were to lose one or more of these individuals, we might experience difficulties in competing effectively, developing our technologies and implementing our business strategies.

Our research and development programs depend on our ability to attract and retain highly skilled scientists and technicians. We may not be able to attract or retain qualified scientists and technicians in the future due to the intense competition for qualified personnel among medical technology businesses, particularly in the San Francisco Bay Area. We also face competition from universities and public and private research institutions in recruiting and retaining highly qualified personnel. In addition, our success depends on our ability to attract and retain salespeople with extensive experience in wound care and close relationships with the medical community, including physicians and other medical staff. We may have difficulties locating, recruiting or retaining qualified salespeople, which could cause a delay or decline in the rate of adoption of our products. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience constraints that will adversely affect our ability to support our research, development and sales programs.

The dermatology, wound and skin care industries are highly competitive and subject to rapid technological change. If our competitors are better able to develop and market products that are less expensive or more effective than any products that we may develop, our commercial opportunity will be reduced or eliminated.

Our success depends, in part, upon our ability to stay at the forefront of technological change and maintain a competitive position. We compete with large healthcare, pharmaceutical and biotechnology companies, along with smaller or early-stage companies that have collaborative arrangements with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Our competitors may:

- develop and patent processes or products earlier than we will;
- develop and commercialize products that are less expensive or more efficient than any products that we may develop;
- obtain regulatory approvals for competing products more rapidly than we will; and
- improve upon existing technological approaches or develop new or different approaches that render our technology or products obsolete or non-competitive.

As a result, we may not be able to successfully commercialize any future products.

The success of our research and development efforts may depend on our ability to find suitable collaborators to fully exploit our capabilities. If we are unable to establish collaborations or if these future collaborations are unsuccessful, our research and development efforts may be unsuccessful, which could adversely affect our results of operations and financial condition.

An important element of our business strategy will be to enter into collaborative or license arrangements under which we license our Microcyn® Technology to other parties for development and commercialization. We expect to seek collaborators for our drug candidates and for a number of our potential products because of the expense, effort and expertise required to conduct additional clinical trials and further develop those potential product candidates. Because collaboration arrangements are complex to negotiate, we may not be successful in our attempts to establish these arrangements. If we need third party assistance in identifying and negotiating one or more acceptable arrangements, it might be costly. Also, we may not have products that are desirable to other parties, or we may be unwilling to license a potential product because the party interested in it is a competitor. The terms of any arrangements that we establish may not be favorable to us. Alternatively, potential collaborators may decide against entering into an agreement with us because of our financial, regulatory or intellectual property position or for scientific, commercial or other reasons. If we are not able to establish collaborative agreements, we may not be able to develop and commercialize new products, which would adversely affect our business and our revenues.

In order for any of these collaboration or license arrangements to be successful, we must first identify potential collaborators or licensees whose capabilities complement and integrate well with ours. We may rely on these arrangements for not only financial resources, but also for expertise or economies of scale that we expect to need in the future relating to clinical trials, manufacturing, sales and marketing, and for licenses to technology rights. However, it is likely that we will not be able to control the amount and timing or resources that our collaborators or licensees devote to our programs or potential products. If our collaborators or licensees prove difficult to work with, are less skilled than we originally expected, or do not devote adequate resources to the program, the relationship will not be successful. If a business combination involving a collaborator or licensee and a third party were to occur, the effect could be to diminish, terminate or cause delays in development of a potential product.

If we are unable to comply with broad and complex federal and state fraud and abuse laws, including state and federal anti-kickback laws, we could face substantial penalties and our products could be excluded from government healthcare programs.

We are subject to various federal and state laws pertaining to healthcare fraud and abuse, which include, among other things, "anti-kickback" laws that prohibit payments to induce the referral of products and services, and "false claims" statutes that prohibit the fraudulent billing of federal healthcare programs. Our operations are subject to the Federal Anti-Kickback Statute, a criminal statute that, subject to certain statutory exceptions, prohibits any person from knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, to induce or reward a person either (i) for referring an individual for the furnishing of items or services for which payment may be made in whole or in part by a government healthcare program such as Medicare or Medicaid, or (ii) for purchasing, leasing, ordering or arranging for or recommending the purchasing, leasing or ordering of an item or service for which payment may be made under a government healthcare program. Because of the breadth of the federal anti-kickback statute, the Office of Inspector General of the U.S. Department of Health and Human Services was authorized to adopt regulations setting forth additional exceptions to the prohibitions of the statute commonly known as "safe harbors." If all of the elements of an applicable safe harbor are fully satisfied, an arrangement will not be subject to prosecution under the federal anti-kickback statute.

In addition, if there is a change in law, regulation or administrative or judicial interpretations of these laws, we may have to change our business practices or our existing business practices could be challenged as unlawful, which could have a negative effect on our business, financial condition and results of operations.

Healthcare fraud and abuse laws are complex, and even minor, inadvertent irregularities can potentially give rise to claims that a statute or regulation has been violated. The frequency of suits to enforce these laws has increased significantly in recent years and has increased the risk that a healthcare company will have to defend a false claim action, pay fines or be excluded from the Medicare, Medicaid or other federal and state healthcare programs as a result of an investigation arising out of such action. We cannot assure you that we will not become subject to such litigation. Any violations of these laws, or any action against us for violation of these laws, even if we successfully defend against it, could harm our reputation, be costly to defend and divert management's attention from other aspects of our business. Similarly, if the physicians or other providers or entities with which we do business are found to have violated abuse laws, they may be subject to sanctions, which could also have a negative impact on us.

Our efforts to discover and develop potential products may not lead to the discovery, development, commercialization or marketing of actual drug products.

We are currently engaged in a number of different approaches to discover and develop new product applications and product candidates. Discovery and development of potential drug candidates are expensive and time-consuming, and we do not know if our efforts will lead to discovery of any drug candidates that can be successfully developed and marketed. If our efforts do not lead to the discovery of a suitable drug candidate, we may be unable to grow our clinical pipeline or we may be unable to enter into agreements with collaborators who are willing to develop our drug candidates.

We may not be able to maintain sufficient product liability insurance to cover claims against us.

Product liability insurance for the healthcare industry is generally expensive to the extent it is available at all. We may not be able to maintain such insurance on acceptable terms or be able to secure increased coverage if the commercialization of our products progresses, nor can we be sure that existing or future claims against us will be covered by our product liability insurance. Moreover, the existing coverage of our insurance policy or any rights of indemnification and contribution that we may have may not be sufficient to offset existing or future claims. A successful claim against us with respect to uninsured liabilities or in excess of insurance coverage and not subject to any indemnification or contribution could have a material adverse effect on our future business, financial condition, and results of operations.

If any of our third-party contractors fail to perform their responsibilities to comply with FDA rules and regulations, the manufacture, marketing and sales of our products could be delayed, which could decrease our revenues.

Supplying the market with our Microcyn® Technology products requires us to manage relationships with an increasing number of collaborative partners, suppliers and third-party contractors. As a result, our success depends partially on the success of these third parties in performing their responsibilities to comply with FDA rules and regulations. Although we pre-qualify our contractors and we believe that they are fully capable of performing their contractual obligations, we cannot directly control the adequacy and timeliness of the resources and expertise that they apply to these activities. For example, we and our suppliers are required to comply with the FDA's quality system regulations, which cover the methods and documentation of the design, testing, production, control, quality assurance, labeling, packaging, storage and shipping of our products. The FDA enforces the quality system regulation through inspections.

In December 2011, we initiated a voluntary recall of select lot numbers of certain of our Microcyn-based products due to product labeling. The voluntary recall was prompted after notification by the FDA that a limited number of our products were improperly labeled. The recall was classified by the FDA as a Class II recall, which means the probability of serious health consequences was remote. Customer safety and product quality are critically important to us and to date we have received no complaints regarding customer safety or product quality issues. The costs of the voluntary recall were nominal and there were no restrictions on our future sales of Microcyn-based products, other than revising our product labeling for certain products. The voluntary recall did not materially impact revenues.

If any of our partners or contractors fail to perform their obligations in an adequate and timely manner, or fail to comply with the FDA's rules and regulations, including failure to comply with quality systems regulations or a corrective action submitted to the FDA after notification by the FDA of a deficiency is deemed insufficient, then the manufacture, marketing and sales of our products could be delayed. Our products could be detained or seized, the FDA could order a recall, or require our partner to replace or offer refunds for our products. The FDA could also require our partner, and, depending on our agreement with our partner, us, to notify health professionals and others that the products present unreasonable risks of substantial harm to the public health. If any of these events occur, the manufacture, marketing and sales of our products could be delayed which could decrease our revenues.

If we fail to comply with the FDA's rules and regulations and are subject to a FDA recall as part of an FDA enforcement action, the associated costs could like have a material adverse effect on our business, financial position, results of operations and cash flows.

Our Company, our products, the manufacturing facilities for our products, the distribution of our products, and our promotion and marketing materials are subject to strict and continual review and periodic inspection by the FDA and other regulatory agencies for compliance with pre-approval and post-approval regulatory requirements.

If we fail to comply with the FDA's rules and regulations, we could be subject to an enforcement action by the FDA. The FDA could undertake regulatory actions, including seeking a consent decree, recalling or seizing our products, ordering a total or partial shutdown of production, delaying future marketing clearances or approvals, and withdrawing or suspending certain of our current products from the market. A product recall, restriction, or withdrawal could result in substantial and unexpected expenditures, destruction of product inventory, and lost revenues due to the unavailability of one or more of our products for a period of time, which could reduce profitability and cash flow. In addition, a product recall or withdrawal could divert significant management attention and financial resources. If any of our products are subject to an FDA recall, we could incur significant costs and suffer economic losses. Production of our products could be suspended and we could be required to establish inventory reserves to cover estimated inventory losses for all work-in-process and finished goods related to products we or our third-party contractors manufacture. A recall of a material amount of our products could have a significant, unfavorable impact on our future gross margins.

If our products fail to comply with FDA and other governmental regulations, or our products are deemed defective, we may be required to recall our products and we could suffer adverse public relations that could adversely impact our sales, operating results, and reputation which would adversely affect our business operations.

We may be exposed to product recalls, including voluntary recalls or withdrawals, and adverse public relations if our products are alleged to cause injury or illness, or if we are alleged to have mislabeled or misbranded our products or otherwise violated governmental regulations. Governmental authorities can also require product recalls or impose restrictions for product design, manufacturing, labeling, clearance, or other issues. For the same reasons, we may also voluntarily elect to recall, restrict the use of a product or withdraw products that we consider below our standards, whether for quality, packaging, appearance or otherwise, in order to protect our brand reputation.

Product recalls, product liability claims (even if unmerited or unsuccessful), or any other events that cause consumers to no longer associate our brand with high quality and safe products may also result in adverse publicity, hurt the value of our brand, harm our reputation among our customers and other healthcare professionals who use or recommend the products, lead to a decline in consumer confidence in and demand for our products, and lead to increased scrutiny by federal and state regulatory agencies of our operations, any of which could have a material adverse effect on our brand, business, performance, prospects, value, results of operations and financial condition.

Risks Related to Our Common Stock

Our operating results may fluctuate, which could cause our stock price to decrease.

Fluctuations in our operating results may lead to fluctuations, including declines, in our share price. Our operating results and our share price may fluctuate from period to period due to a variety of factors, including:

- demand by physicians, other medical staff and patients for our Microcyn-based products;
- reimbursement decisions by third-party payors and announcements of those decisions;
- clinical trial results published by others in our industry and publication of results in peer-reviewed journals or the presentation at medical conferences;
- the inclusion or exclusion of our Microcyn-based products in large clinical trials conducted by others;
- actual and anticipated fluctuations in our quarterly financial and operating results;
- developments or disputes concerning our intellectual property or other proprietary rights;
- issues in manufacturing our product candidates or products;
- new or less expensive products and services or new technology introduced or offered by our competitors or by us;
- the development and commercialization of product enhancements;
- changes in the regulatory environment;
- delays in establishing new strategic relationships;
- costs associated with collaborations and new product candidates;
- introduction of technological innovations or new commercial products by us or our competitors;
- litigation or public concern about the safety of our product candidates or products;
- changes in recommendations of securities analysts or lack of analyst coverage;
- failure to meet analyst expectations regarding our operating results;
- additions or departures of key personnel; and
- general market conditions.

Variations in the timing of our future revenues and expenses could also cause significant fluctuations in our operating results from period to period and may result in unanticipated earning shortfalls or losses. In addition, The Nasdaq Capital Market, in general, and the market for life sciences companies, in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies.

If an active, liquid trading market for our common stock does not develop, you may not be able to sell your shares quickly or at or above the price you paid for it.

Although our common stock is listed on The Nasdaq Capital Market, an active and liquid trading market for our common stock has not yet and may not ever develop or be sustained. You may not be able to sell your shares quickly or at or above the price you paid for our stock if trading in our stock is not active.

Anti-takeover provisions in our charter and by-laws and under Delaware law may make it more difficult for stockholders to change our management and may also make a takeover difficult.

Our corporate documents and Delaware law contain provisions that limit the ability of stockholders to change our management and may also enable our management to resist a takeover. These provisions include:

- the ability of our board of directors to issue and designate, without stockholder approval, the rights of up to 5,000,000 shares of convertible preferred stock, which rights could be senior to those of common stock;
- limitations on persons authorized to call a special meeting of stockholders; and
- advance notice procedures required for stockholders to make nominations of candidates for election as directors or to bring matters before meetings of stockholders.

We are subject to Section 203 of the Delaware General Corporation Law, which, subject to certain exceptions, prohibits "business combinations" between a publicly-held Delaware corporation and an "interested stockholder," which is generally defined as a stockholder who became a beneficial owner of 15% or more of a Delaware corporation's voting stock for a three-year period following the date that such stockholder became an interested stockholder.

These provisions might discourage, delay or prevent a change of control in our management. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors and cause us to take other corporate actions. In addition, the existence of these provisions, together with Delaware law, might hinder or delay an attempted takeover other than through negotiations with our board of directors.

Our stockholders may experience substantial dilution in the value of their investment if we issue additional shares of our capital stock or other securities convertible into common stock.

Our charter allows us to issue up to 14,285,715 shares of our common stock and to issue and designate, without stockholder approval, the rights of up to 5,000,000 shares of convertible preferred stock. In the event we issue additional shares of our capital stock, dilution to our stockholders could result. In addition, if we issue and designate a class of convertible preferred stock, these securities may provide for rights, preferences or privileges senior to those of holders of our common stock.

Risks Related to Planned Separation

Our Company and Ruthigen may be unable to achieve some or all of the benefits that we expect to achieve from our Separation.

On January 31, 2014, we entered into certain new agreements with our subsidiary, Ruthigen, Inc. Previously, we had entered into three key agreements with Ruthigen, that governed our relationship with Ruthigen following the completion of Ruthigen's initial public offering. Each of these agreements (the "Ancillary Agreements") was entered into in the overall context of Ruthigen's separation from us (the "Separation"). The effective date for the Ancillary Agreements is March 26, 2014, the closing date of Ruthigen's initial public offering.

The strategic, operating and financial benefits expected to result from the Separation may be delayed or may never be realized at all. For instance, there can be no assurance that by separating the businesses that either our Company or Ruthigen will be better positioned to capitalize on future market opportunities or that either company will be able to increase their respective shareholder value.

Risks Related to this Offering

We will have broad discretion in how we use the proceeds, and we may use the proceeds in ways in which you and other stockholders may disagree.

We intend to use the net proceeds from this offering for working capital and general corporate purposes. Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business or cause the price of our common stock to decline.

Investors in this offering may suffer immediate and substantial dilution in the net tangible book value per share of our common stock.

Because the price per share of common stock in this offering may be substantially higher than the net tangible book value per share of common stock, investors in this offering may suffer immediate and substantial dilution in the net tangible book value per share of common stock. The shares in this offering will be sold at market prices which may fluctuate substantially. For purposes of calculating dilution, we have assumed a sale price of $3.77 per share which was the closing price of our stock on March 31, 2014. However, since the shares may be sold at a variety of prices, these dilution numbers may not be accurate. Assuming that an aggregate of 2,429,443 shares of our common stock are sold at a price of $3.77 per share, the last reported sale price of our common stock on the Nasdaq Capital Market on March 31, 2014, for aggregate gross proceeds of $9.16 million, and after deducting commissions and estimated offering expenses payable by us, you will experience immediate dilution of $1.96 per share, representing the difference between our as adjusted net tangible book value per share as of March 31, 2014 after giving effect to this offering and the assumed offering price. See the section entitled “Dilution” below for a more detailed illustration of the dilution you would incur if you participate in this offering.

You may experience future dilution as a result of future equity offerings.

In order to raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock at prices that may not be the same as the price per share in this offering. We may sell shares or other securities in any other offering at a price per share that is less than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock, or securities convertible or exchangeable into common stock, in future transactions may be higher or lower than the price per share paid by investors in this offering.

FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference in this prospectus supplement contain forward looking statements. When used in this prospectus supplement, the words “expects,” “anticipates,” “intends,” “estimates,” “plans,” “projects,” “continue,” “ongoing,” “potential,” “expect,” “predict,” “believe,” “intend,” “may,” “can,” “will,” “should,” “could,” “would,” “proposal,” and similar expressions are intended to identify forward-looking statements.

You should not place undue reliance on these forward-looking statements. Our actual results could differ materially from those anticipated in the forward-looking statements for many reasons, including the reasons described in our “Risk Factors” section. Although we believe the expectations reflected in the forward-looking statements are reasonable, they relate only to events as of the date on which the statements are made. These forward-looking statements speak only as of the date of this prospectus supplement. We expressly disclaim any obligation or undertaking to update or revise any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based, except as required by law.

USE OF PROCEEDS

We may issue and sell shares of our common stock having aggregate sales proceeds of up to $9,159,000 from time to time. Because there is no minimum offering amount required as a condition to close this offering, the actual total public offering amount, commissions and proceeds to us, if any, are not determinable at this time. We estimate that the net proceeds from the sale of the shares of common stock that we are offering may be up to approximately $8.9 million, after deducting MLV's commission and estimated offering expenses payable by us.

We intend to use the net proceeds of this offering for working capital and general corporate purposes. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to us from this offering. Accordingly, our management will have broad discretion in the application of these proceeds.

DILUTION

Purchasers of common stock offered by this prospectus supplement and the accompanying prospectus will suffer immediate and substantial dilution in the net tangible book value per share of common stock. Our net tangible book value on December 31, 2013 was approximately $7.2 million, or approximately $.31 per share of common stock based upon 7,239,131 shares outstanding as of December 31, 2013. Net tangible book value per share is determined by dividing our net tangible book value, which consists of tangible assets less total liabilities, by the number of shares of common stock outstanding on that date.

The shares in this offering will be sold at market prices which may fluctuate substantially. For purposes of calculating dilution, we have assumed a sale price of $3.77 per share which was the closing price of our stock on March 31, 2014. However, since the shares may be sold at a variety of prices, these dilution numbers may not be accurate.

After giving effect to the sale of our common stock in the aggregate amount of $9,159,000 at an assumed offering price of $3.77 per share, the last reported sale price of our common stock on the Nasdaq Capital Market on March 31, 2014, and after deducting estimated offering commissions and offering expenses payable by us, our net tangible book value as of December 31, 2013 would have been approximately $9.7 million, or $1.81 per share of common stock. This represents an immediate increase in net tangible book value of $1.50 per share to existing stockholders and immediate dilution in net tangible book value of $1.96 per share to new investors purchasing our common stock in this offering at the public offering price. The following table illustrates this calculation on a per share basis:

Assumed public offering price per share		$3.77
Net tangible book value per share of as December 31, 2013	$ .31	
Increase in net tangible book value per share attributable to this offering	1.50	
As adjusted net tangible book value per share as of December 31, 2013, after giving effect to this offering		1.81
Dilution in net tangible book value per share to new investors purchasing our common stock in this offering		$1.96

The foregoing table is based on 7,239,131 shares of our common stock outstanding as of December 31, 2013 and excludes:

- 1,253,000 shares of our common stock issuable upon the exercise of stock options outstanding as of December 31, 2013, at a weighted average exercise price of $11.78 per share;
- 1,334,000 shares of common stock issuable upon the exercise of warrants outstanding as of December 31, 2013, at an exercise price of $18.31 per share; and
- 823,648 shares of common stock reserved for future issuance under our equity incentive plans as of December 31, 2013.

To the extent that outstanding options or warrants outstanding as of December 31, 2013 have been or may be exercised or other shares issued, investors purchasing our common stock in this offering may experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

PLAN OF DISTRIBUTION

We have entered into an At-the-Market Issuance Sales Agreement with MLV under which we may issue and sell our common stock from time to time through MLV acting as agent, subject to certain limitations, including the number of shares registered under the registration statement to which the offering relates. The form of the sales agreement was filed as an exhibit to a report filed under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and is incorporated by reference in this prospectus supplement. The sales, if any, of shares of our common stock made under the sales agreement will be made by any method that is deemed to be an "at the market offering" as defined in Rule 415 promulgated under the Securities Act, including, without limitation, sales made directly on or through the Nasdaq Capital Market, or any other existing trading market for our common stock, sales made to or through a market maker other than on an exchange or otherwise, certain negotiated transactions at market prices and/or any other method permitted by law. We may instruct MLV not to sell common stock if the sales cannot be effected at or above the price designated by us from time to time. We or MLV may suspend the offering of common stock upon notice and subject to other conditions.

Each time we wish to issue and sell common stock under the sales agreement, we will notify MLV of the number of shares proposed to be issued, the dates on which such sales are requested to be made, any limitation on the number of shares which may be sold in any one trading day, any minimum price below which sales may not be made, and other sales parameters as we deem appropriate. Once we have so instructed MLV, unless MLV declines to accept the terms of the notice, MLV has agreed to use its commercially reasonable efforts consistent with its normal trading and sales practices to sell such shares up to the amount specified on such terms. The obligations of MLV under the sales agreement to sell our common stock are subject to a number of conditions that we must meet.

We will pay MLV commissions for its services in acting as agent in the sale of common stock. MLV will be entitled to a commission equal to 3% of the aggregate gross proceeds from the sale of common stock offered hereby. In addition, we have agreed to reimburse certain expenses of MLV for fees and disbursements related to its legal counsel in an amount not to exceed $25,000. We estimate that the total expenses for the offering, excluding compensation payable to MLV under the terms of the sales agreement, will be approximately $300,000.

Settlement for sales of common stock will generally occur on the third business day following the date on which any sales are made, or on some other date that is agreed upon by us and MLV in connection with a particular transaction, in return for payment of the net proceeds to us. There is no arrangement for funds to be received in an escrow, trust or similar arrangement.

In connection with the sale of the common stock on our behalf, MLV may, and will with respect to sales effected in an "at-the-market offering," be deemed to be an "underwriter" within the meaning of the Securities Act and the compensation of MLV may be deemed to be underwriting commissions or discounts. We have agreed to provide indemnification and contribution to MLV with respect to certain civil liabilities, including liabilities under the Securities Act.

The offering of our common stock pursuant to the sales agreement will terminate upon the earlier of (i) the sale of all of our common stock provided for in this prospectus supplement, or (ii) termination of the sales agreement as provided therein.

MLV and its affiliates may in the future provide various investment banking and other financial services for us and our affiliates, for which services they may in the future receive customary fees. To the extent required by Regulation M, MLV will not engage in any market making activities involving our common stock while the offering is ongoing under this prospectus supplement.

This summary of the material provisions of the sales agreement does not purport to be a complete statement of its terms and conditions. A copy of the sales agreement is filed with the Securities and Exchange Commission, and is incorporated by reference into the registration statement of which this prospectus supplement is a part. See the section below entitled "Where You Can Find More Information."

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon by Trombly Business Law, PC, Boulder, Colorado. LeClairRyan, A Professional Corporation, New York, New York, is counsel for MLV in connection with this offering.

EXPERTS

The consolidated financial statements of Oculus Innovative Sciences, Inc. appearing in Oculus Innovative Sciences, Inc.'s annual report on Form 10-K for the year ended March 31, 2013, filed June 25, 2013 have been audited by Marcum LLP, an independent registered public accounting firm, as set forth in their report included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC under the Securities Act of 1933, as amended, and our registration was declared effective on May 3, 2011. This prospectus supplement and the accompanying prospectus are part of the registration statement but the registration statement includes and incorporates by reference additional information and exhibits. We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement and any document we file with the SEC at the public reference room maintained by the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the public reference room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site that contains reports, proxy and information statements and other information regarding companies, such as ours, that file documents electronically with the SEC. The address of that site on the Internet is http://www.sec.gov. The information on the SEC's website is not part of this prospectus supplement and the accompanying prospectus, and any references to this website or any other website are inactive textual references only.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC permits us to "incorporate by reference" the information contained in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents rather than by including them in this prospectus supplement and the accompanying prospectus. Information that is incorporated by reference is considered to be part of this prospectus supplement and the accompanying prospectus and you should read it with the same care that you read this prospectus supplement and the accompanying prospectus. Later information that we file with the SEC will automatically update and supersede the information that is either contained, or incorporated by reference, in this prospectus supplement and the accompanying prospectus, and will be considered to be a part of this prospectus supplement and the accompanying prospectus from the date those documents are filed. We have filed with the SEC, and incorporate by reference the following in this prospectus supplement and the accompanying prospectus:

- our Annual Report on Form 10-K for the year ended March 31, 2013, filed June 25, 2013;
- our Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2013, filed on August 14, 2013; our Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2013, filed on November 19, 2013; and our Quarterly Report on Form 10-Q for the fiscal quarter ended December 31, 2013, filed on February 14, 2014;
- our Current Reports on Form 8-K filed on May 29, 2013; May 30, 2013; June 7, 2013 and amended on September 24, 2013; June 13, 2013; August 5, 2013; August 8, 2013; September 17, 2013; September 24, 2013; November 19, 2013; November 27, 2013; December 6, 2013; December 18, 2013; February 6, 2014; February 13, 2014; February 26, 2014; and April 1, 2014.
- our Proxy Statement on Schedule 14A filed on July 29, 2013; and
- the description of our common stock contained in our Registration Statement on Form 8-A filed on December 15, 2006, including any amendment or report filed for the purpose of updating such description.

In addition, all documents that we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities and Exchange Act of 1934, as amended, after the date of the initial registration statement of which this prospectus is a part and prior to the effectiveness of the registration statement as well as all such documents that we file with the SEC after the date of this prospectus and before the termination of the offering of our securities shall be deemed incorporated by reference into this prospectus and to be a part of this prospectus from the respective dates of filing such documents. Unless specifically stated to the contrary, none of the information that we disclose under Items 2.02 or 7.01 of any Current Report on Form 8-K that we may from time to time furnish to the SEC will be incorporated by reference into, or otherwise included in, this prospectus.

You may request a copy of any or all of the documents incorporated by reference but not delivered with this prospectus supplement and the accompanying prospectus, at no cost, by writing or telephoning us at the following address and number: Investor Relations, Oculus Innovative Sciences, Inc., 1129 N. McDowell Blvd., Petaluma, California 94954, telephone (707) 283-0550. We will not, however, send exhibits to those documents, unless the exhibits are specifically incorporated by reference in those documents.

PROSPECTUS

$75,000,000

OCULUS INNOVATIVE SCIENCES, INC.

Common Stock
Preferred Stock
Warrants
Units

We may, from time to time, offer and sell common stock, preferred stock or warrants, either separately or in units, in one or more offerings. The preferred stock and warrants may be convertible into or exercisable or exchangeable for common or preferred stock. We will specify in the accompanying prospectus supplement more specific information about any such offering. The aggregate initial offering price of all securities sold under this prospectus will not exceed $75,000,000, including the U.S. dollar equivalent if the public offering of any such securities is denominated in one or more foreign currencies, foreign currency units or composite currencies.

We may offer these securities independently or together in any combination for sale directly to investors or through underwriters, dealers or agents. We will set forth the names of any underwriters, dealers or agents and their compensation in the accompanying prospectus supplement.

This prospectus may not be used to sell any of these securities unless accompanied by a prospectus supplement.

Our common stock is traded on the NASDAQ Global Market under the symbol “OCLS.” On December 21, 2010, the closing price of our common stock on the NASDAQ Global Market was $1.73 per share. The market value of our outstanding common equity held by non-affiliates on December 21, 2010 was $38,439,866. We have sold $664,475 of our securities pursuant to General Instruction I.B.6 of Form S-3 during the prior 12 calendar month period that ends on and includes the date of this prospectus.

Investing in our securities involves a high degree of risk. See the section entitled “Risk Factors” beginning on page 3.

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

The date of this prospectus is May 3, 2011.

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You should rely only on the information incorporated by reference or provided in this prospectus, any prospectus supplement and the registration statement. We have not authorized anyone else to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any state where the offer or sale is not permitted. You should assume that the information in this prospectus and any prospectus supplement, or incorporated by reference, is accurate only as of the dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus or incorporated by reference. This summary does not contain all of the information you should consider before buying shares of our common stock, preferred stock, warrants, or units or any combination of these securities. You should read the entire prospectus carefully, especially the risks of investing in our securities that we describe under "Risk Factors" and our consolidated financial statements appearing in our annual and periodic reports incorporated in this prospectus by reference, before deciding to invest in our securities. Unless the context requires otherwise, references to "Oculus," "the Company," "the Registrant," "we," "our" and "us" refer to Oculus Innovative Sciences, Inc.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, using a "shelf" registration, or continuous offering, process. Under this shelf registration process, we may, from time to time, issue and sell any combination of preferred stock, common stock or warrants, either separately or in units, in one or more offerings with a maximum aggregate offering price of $75,000,000, including the U.S. dollar equivalent if the public offering of any such securities is denominated in one or more foreign currencies, foreign currency units or composite currencies.

This prospectus provides you with a general description of the securities we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering and the offered securities. Any prospectus supplement may also add, update or change information contained in this prospectus. Any statement that we make in this prospectus will be modified or superseded by any inconsistent statement made by us in a prospectus supplement. The registration statement we filed with the SEC includes exhibits that provide more detail of the matters discussed in this prospectus. You should read this prospectus and the related exhibits filed with the SEC and any prospectus supplement, together with additional information described under the heading "Where You Can Find More Information," before making your investment decision.

RISK FACTORS

Investing in our securities involves a high degree of risk. The prospectus supplement relating to a particular offering will contain a discussion of risks applicable to an investment in the securities offered. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading "Risk Factors" in the applicable prospectus supplement together with all of the other information contained in the prospectus supplement or appearing or incorporated by reference in this prospectus.

OUR COMPANY

We develop, manufacture and market a family of tissue care products that cure infections and, through a separate mechanism of action, enhance healing while reducing the need for antibiotics. Infection is a serious potential complication in both chronic and acute wounds, and controlling infection is a critical step in wound healing. Our platform technology, called Microcyn®, is a proprietary solution of electrically charged oxychlorine small molecules designed to treat a wide range of organisms that cause disease (pathogens). These include viruses, fungi, spores and antibiotic-resistant strains of bacteria, such as methicillin-resistant *Staphylococcus aureus*, or MRSA, and vancomycin-resistant *Enterococcus,* or VRE, in wounds, as well as *Clostridium difficile*, or C. diff, a highly contagious bacteria spread by human contact.

We do not have the necessary regulatory approvals to market Microcyn in the United States as a drug. In the United States our product does, however, have six clearances as a 510(k) medical device for the following summary indications:

1) moistening and lubricating absorbent wound dressings for traumatic wounds requiring a prescription;

2) moistening and debriding acute and chronic dermal lesions requiring a prescription;

3) moistening absorbent wound dressings and cleaning minor cuts as an over-the-counter product;

4) management of exuding wounds such as leg ulcers, pressure ulcers and diabetic ulcers, and for the management of mechanical or surgical debridement of wounds in a gel form and required as a prescription;

5) debridement of wounds, such as stage I-IV pressure ulcers, diabetic foot ulcers, post surgical wounds, first and second degree burns, grafted and donor sites as a preservative, which can kill listed bacteria such as MRSA & VRE and required as a prescription; and

6) as a hydrogel, for management of wounds including itch and pain relief associated with dermal irritation, sores, injuries and ulcers of dermal tissue as a prescription. As an over-the-counter product, the hydrogel is intended to relieve itch and pain from minor skin irritations, lacerations, abrasions and minor burns. It is also indicated for management of irritation and pain from minor sunburn.

We do not have the necessary regulatory clearance or approval to market Microcyn in the U.S. as a medical device for an antimicrobial or wound healing indication. In the future we expect to apply to the FDA for clearance as an antimicrobial in a liquid and a hydrogel form and as conducive to wound healing via a 510(k) medical device clearance.

Outside the United States, our product has a CE Mark device approval in Europe for debriding, irrigating and moistening acute and chronic wounds in comprehensive wound treatment by reducing microbial load and creating a moist environment. In Mexico, we are approved as a drug for antiseptic treatment of wounds and infected areas. In India, our technology has a drug license for cleaning and debriding in wound management while in China there is a medical device approval by the State Food and Drug Administration for reducing the propagation of microbes in wounds and creating a moist environment for wound healing.

While in the U.S. we do not have the necessary regulatory clearance for an antimicrobial or wound healing indication, clinical and laboratory testing we conducted in connection with our submissions to the FDA, as well as physician clinical studies and scientific papers, suggest that our Microcyn Technology may help reduce a wide range of pathogens from acute and chronic wounds while curing or improving infection and concurrently enhancing wound healing through modes of action unrelated to the treatment of infection. These physician clinical studies suggest that our Microcyn is safe, easy to use and complementary to many existing treatment methods in wound care. Physician clinical studies and usage in the United States suggest that our 510(k) cleared products may shorten hospital stays, lower aggregate patient care costs and, in certain cases, reduce the need for systemic antibiotics. We are also pursuing the use of our Microcyn platform technology in other markets outside of wound and skin care, including the respiratory, ophthalmology, dental, dermatology, animal healthcare and industrial markets.

We incorporated under the laws of the State of California in April 1999 as Micromed Laboratories, Inc. In August 2001, we changed our name to Oculus Innovative Sciences, Inc. In December 2006, we reincorporated under the laws of the State of Delaware. Our principal executive offices are located at 1129 N. McDowell Blvd., Petaluma, California, 94954, and our telephone number is (707) 782-0792. We have two principal subsidiaries: Oculus Technologies of Mexico, S.A. de C.V., organized in Mexico, and Oculus Innovative Sciences Netherlands, B.V., organized in the Netherlands. On January 20, 2009, we dissolved our subsidiary, Oculus Innovative Sciences Japan, KK., which was organized under Japanese law. Our fiscal year end is March 31. Our website is www.oculusis.com. Information contained on our website does not constitute part of this prospectus.

RISK FACTORS

Risks Related to Our Business

We have a history of losses, we expect to continue to incur losses and we may never achieve profitability.

We incurred net losses of $8,232,000 and $17,656,000 for the years ended March 31, 2010 and 2009, respectively. At March 31, 2010, our accumulated deficit amounted to $117,037,000. During the year ended March 31, 2010, net cash used in operating activities amounted to $6,639,000. At March 31, 2010, our working capital amounted to $6,315,000. We expect to continue incurring losses for the foreseeable future and may raise additional capital to pursue product development initiatives, penetrate markets for the sale of our products and continue as a going concern. We believe that we have access to capital resources through possible public or private equity offerings, debt financings, corporate collaborations or other means. If the economic climate in the U.S. does not improve or continues to deteriorate, our ability to raise additional capital could be negatively impacted. If we are unable to secure additional capital, we may be required to curtail our research and development initiatives and take additional measures to reduce costs in order to conserve our cash in amounts sufficient to sustain operations and meet our obligations. These measures could cause significant delays in our efforts to commercialize our products in the U.S., which are critical to the realization of our business plan and to future operations.

Declining general economic or business conditions may have a negative impact on our business.

Concerns over inflation, energy costs, geopolitical issues, the availability and cost of credit, the U.S. mortgage market and a declining real estate market in the U.S. have contributed to increased volatility and diminished expectations for the global economy and expectations of slower global economic growth going forward. These factors, combined with volatile oil prices, declining business and consumer confidence and increased unemployment, have precipitated a global economic slowdown. If the economic climate in the U.S. does not improve or continues to deteriorate, our business, including our patient population, our suppliers and our third-party payors, could be negatively affected, resulting in a negative impact on our business.

Our inability to raise additional capital on acceptable terms in the future may cause us to curtail certain operational activities, including regulatory trials, sales and marketing, and international operations, in order to reduce costs and sustain the business, and would have a material adverse effect on our business and financial condition.

We expect capital outlays and operating expenditures to increase over the next several years as we work to conduct regulatory trials, commercialize our products and expand our infrastructure. We may need to raise additional capital to, among other things:

- fund our clinical trials and preclinical studies;
- sustain commercialization of our current products or new products;
- expand our manufacturing capabilities;
- increase our sales and marketing efforts to drive market adoption and address competitive developments;
- acquire or license technologies; and
- finance capital expenditures and our general and administrative expenses.

Our present and future funding requirements will depend on many factors, including but not limited to:

- the progress and timing of our clinical trials;
- the level of research and development investment required to maintain and improve our technology position;
- the costs of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights;
- our efforts to acquire or license complementary technologies or acquire complementary businesses;
- changes in product development plans needed to address any difficulties in commercialization;
- competing technological and market developments; and
- changes in regulatory policies or laws that affect our operations.

If we raise additional funds by issuing equity securities, dilution to our stockholders could result. Any equity securities issued may also provide for rights, preferences or privileges senior to those of holders of our common stock. If we raise additional funds by issuing debt securities, these debt securities would have rights, preferences and privileges senior to those of holders of our common stock, and the terms of the debt securities issued could impose significant restrictions on our operations. If we raise additional funds through collaborations or licensing arrangements, we might be required to relinquish significant rights to our technologies or products, or grant licenses on terms that are not favorable to us. A failure to obtain adequate funds may cause us to curtail certain operational activities, including regulatory trials, sales and marketing, and international operations, in order to reduce costs and sustain the business, and would have a material adverse effect on our business and financial condition.

We do not have the necessary regulatory approvals to market Microcyn as a drug in theUnited States.

We have obtained six 510(k) clearances in the United States that permit us to sell Microcyn-based products as medical devices. Before we are permitted to sell Microcyn as a drug in the United States, we must, among other things, successfully complete additional preclinical studies and well-controlled clinical trials, submit a new drug application to the FDA and obtain FDA approval.

The FDA approval process is expensive and uncertain, requires detailed and comprehensive scientific and other data and generally takes several years. Despite the time and expense exerted, approval is never guaranteed. Even if we obtain FDA approval to sell Microcyn as a drug, we may not be able to successfully commercialize Microcyn as a drug in the United States and may never recover the substantial costs we have invested in the development of our Microcyn-based products.

Delays or adverse results in clinical trials could result in increased costs to us and could delay our ability to generate revenue.

Clinical trials can be long and expensive, and the outcome of clinical trials is uncertain and subject to delays. It may take several years to complete clinical trials, if at all, and a product candidate may fail at any stage of the clinical trial process. The length of time required varies substantially according to the type, complexity, novelty and intended use of the product candidate. Interim results of a preclinical study or clinical trial do not necessarily predict final results, and acceptable results in preclinical studies or early clinical trials may not be repeatable in later subsequent clinical trials. The commencement or completion of any of our clinical trials may be delayed or halted for a variety of reasons, including the following:

- insufficient funds to continue our clinical trials;
- changes in the FDA requirements for approval, including requirements for testing efficacy or safety;
- lack of FDA or other regulatory authority approvals of a clinical trial protocol;
- patients not enrolling in clinical trials at the rate we expect;
- delays in reaching agreement on acceptable clinical trial agreement terms with prospective sites;
- delays in obtaining institutional review board approval to conduct a study at a prospective site;
- third party clinical investigators not performing our clinical trials on our anticipated schedule or consistent with the clinical trial protocol and good clinical practices, or the third party organizations not performing data collection and analysis in a timely or accurate manner; and
- changes in governmental regulations or administrative actions.

We do not know whether future clinical trials will demonstrate safety and efficacy sufficiently to result in additional FDA approvals. While a number of physicians have conducted clinical studies assessing the safety and efficacy of Microcyn for various indications, the data from these studies are not sufficient to support approval of Microcyn as a drug in the United States.

The FDA and other regulatory bodies may also change standards and acceptable trial procedures required for a showing of safety and efficacy. For example, until recently, the FDA accepted non-inferiority clinical trials, or clinical trials that show that a new treatment is equivalent to standard treatment, as the standard for anti-infective drug approvals. On October 12, 2007, the FDA released draft guidance entitled Antibacterial Drug Products: Use of Non-inferiority Studies to Support Approval. This new agency guidance requires either placebo-controlled or superiority trial designs, which are designed to test whether, and to what extent, a new treatment is better than the placebo. The uncertainty of clinical trial protocols and changes within FDA guidelines could have a negative impact on the timelines and milestones for our clinical program.

If we fail to obtain, or experience significant delays in obtaining additional regulatory clearances or approvals to market our current or future products, we may be unable to commercialize these products.

The developing, testing, manufacturing, marketing and selling of medical technology products are subject to extensive regulation by numerous governmental authorities in the United States and other countries. The process of obtaining regulatory clearance and approval of medical technology products is costly and time consuming. Even though the underlying product formulation may be the same or similar, our products are subject to different regulations and approval processes depending upon their intended use.

To obtain regulatory approval of our products as drugs in the United States, we must first show that our products are safe and effective for target indications through preclinical studies (laboratory and animal testing) and clinical trials (human testing). The FDA generally clears marketing of a medical device through the 510(k) pre-market clearance process if it is demonstrated that the new product has the same intended use and the same or similar technological characteristics as another legally marketed Class II device, such as a device already cleared by the FDA through the 510(k) pre-market notification process, and otherwise meets the FDA's requirements. Product modifications, including labeling the product for a new intended use, may require the submission of a new 510(k) clearance and FDA approval before the modified product can be marketed.

The outcomes of clinical trials are inherently uncertain. In addition, we do not know whether the necessary approvals or clearances will be granted or delayed for future products. The FDA could request additional information, changes to formulation or clinical testing that could adversely affect the time to market and sale of products as drugs. If we do not obtain the requisite regulatory clearances and approvals, we will be unable to commercialize our products as drugs or devices and may never recover any of the substantial costs we have invested in the development of Microcyn.

Distribution of our products outside the United States is subject to extensive government regulation. These regulations, including the requirements for approvals or clearance to market, the time required for regulatory review and the sanctions imposed for violations, vary from country to country. We do not know whether we will obtain regulatory approvals in such countries or that we will not be required to incur significant costs in obtaining or maintaining these regulatory approvals. In addition, the export by us of certain of our products that have not yet been cleared for domestic commercial distribution may be subject to FDA export restrictions. Failure to obtain necessary regulatory approvals, the restriction, suspension or revocation of existing approvals or any other failure to comply with regulatory requirements would have a material adverse effect on our future business, financial condition, and results of operations.

If our products do not gain market acceptance, our business will suffer because we might not be able to fund future operations.

A number of factors may affect the market acceptance of our products or any other products we develop or acquire, including, among others:

- the price of our products relative to other treatments for the same or similar treatments;
- the perception by patients, physicians and other members of the health care community of the effectiveness and safety of our products for their indicated applications and treatments;
- our ability to fund our sales and marketing efforts; and
- the effectiveness of our sales and marketing efforts.

If our products do not gain market acceptance, we may not be able to fund future operations, including developing, testing and obtaining regulatory approval for new product candidates and expanding our sales and marketing efforts for our approved products, which would cause our business to suffer.

If our competitors develop products similar to Microcyn, we may need to modify or alter our business strategy, which may delay the achievement of our goals.

Competitors may develop products with similar characteristics to Microcyn. Such similar products marketed by larger competitors can hinder our efforts to penetrate the market. As a result, we may be forced to modify or alter our business and regulatory strategy and sales and marketing plans, as a response to changes in the market, competition and technology limitations, among others. Such modifications may pose additional delays in achieving our goals.

We intend to license or collaborate with third parties in various potential markets, and events involving these strategic partners or any future collaboration could delay or prevent us from developing or commercializing products.

Our business strategy and our short- and long-term operating results will depend in part on our ability to execute on existing strategic collaborations and to license or partner with new strategic partners. We believe collaborations allow us to leverage our resources and technologies and to access markets that are compatible with our own core areas of expertise while avoiding the cost of establishing or maintaining a direct sales force in each market. We may incur significant costs in the use of third parties to identify and assist in establishing relationships with potential collaborators.

To penetrate our target markets, we may need to enter into additional collaborative agreements to assist in the development and commercialization of products. For example, depending upon our analysis of the time and expense involved in obtaining FDA approval to sell a product to treat open wounds, we may choose to license our technology to a third party as opposed to pursuing commercialization ourselves. Establishing strategic collaborations is difficult and time-consuming. Potential collaborators may reject collaborations based upon their assessment of our financial, regulatory or intellectual property position and our internal capabilities. Our discussions with potential collaborators may not lead to the establishment of new collaborations on favorable terms and may have the potential to provide collaborators with access to our key intellectual property filings and next generation formations. We have limited control over the amount and timing of resources that our current collaborators or any future collaborators devote to our collaborations or potential products. These collaborators may breach or terminate their agreements with us or otherwise fail to conduct their collaborative activities successfully and in a timely manner. Further, our collaborators may not develop or commercialize products that arise out of our collaborative arrangements or devote sufficient resources to the development, manufacture, marketing or sale of these products. By entering into collaboration, we may preclude opportunities to collaborate with other third parties who do not wish to associate with our existing third party strategic partners. Moreover, in the event of termination of a collaboration agreement, termination negotiations may result in less favorable terms.

If we are unable to expand our direct domestic sales force, we may not be able to successfully sell our products in the United States.

We have very limited commercialization capability and make Microcyn-based products available primarily through our website and several regional distributors. We plan for a more aggressive commercialization and product launch in the event we obtain drug approval from the FDA or obtain other clearance or approval with wound healing claims. Developing a sales force is expensive and time consuming, and the lack of qualified sales personnel could delay or limit the success of our product launch. Our domestic sales force, if established, will be competing with the sales operations of our competitors, which are better funded and more experienced. We may not be able to develop domestic sales capacity on a timely basis or at all.

Our dependence on a commission-based sales force and distributors for sales could limit or prevent us from selling our products and from realizing long-term revenue growth.

We currently depend on a commission-based sales force and distributors to sell Microcyn in the United States, Europe and other countries and intend to continue to sell our products primarily through a commission-based sales force and distributors in Europe and the United States for the foreseeable future. If we are unable to expand our direct sales force, we will continue to rely on a commission-based sales force and distributors to sell Microcyn. Our existing commission-based sales force and distribution agreements are generally short-term in duration and we may need to pursue alternate partners if the other parties to these agreements terminate or elect not to renew their agreements. If we are unable to retain our current commission-based sales force and distributors for any reason, we must replace them with alternate salespeople and distributors experienced in supplying the wound care market, which could be time-consuming and divert management's attention from other operational matters. In addition, we will need to attract additional distributors to expand the geographic areas in which we sell Microcyn. Distributors may not commit the necessary resources to market and sell our products at the level of our expectations, which could harm our ability to generate revenues. In addition, some of our distributors may also sell products that compete with ours. In some countries, regulatory licenses must be held by residents of the country. For example, the regulatory approval for one product in India is owned and held by our Indian distributor. If the licenses are not in our name or under our control, we might not have the power to ensure their ongoing effectiveness and use by us. If current or future distributors do not perform adequately, or we are unable to locate distributors in particular geographic areas, we may not realize long-term revenue growth.

If we fail to comply with ongoing regulatory requirements, or if we experience unanticipated problems with our products, these products could be subject to restrictions or withdrawal from the market.

Regulatory approvals or clearances that we currently have and that we may receive in the future are subject to limitations on the indicated uses for which the products may be marketed, and any future approvals could contain requirements for potentially costly post-marketing follow-up studies. If the FDA determines that our promotional materials or activities constitute promotion of an unapproved use or we otherwise fail to comply with FDA regulations, we may be subject to regulatory enforcement actions, including a warning letter, injunction, seizure, civil fines or criminal penalty. In addition, the manufacturing, labeling, packaging, adverse event reporting, storing, advertising, promoting, distributing and record-keeping for approved products are subject to extensive regulation. Our manufacturing facilities, processes and specifications are subject to periodic inspection by the FDA, European and other regulatory authorities and from time to time, we may receive notices of deficiencies from these agencies as a result of such inspections. Our failure to continue to meet regulatory standards or to remedy any deficiencies could result in restrictions being imposed on our products or manufacturing processes, fines, suspension or loss of regulatory approvals or clearances, product recalls, termination of distribution, product seizures or the need to invest substantial resources to comply with various existing and new requirements. In the more egregious cases, criminal sanctions, civil penalties, disgorgement of profits or closure of our manufacturing facilities are possible. The subsequent discovery of previously unknown problems with Microcyn, including adverse events of unanticipated severity or frequency, may result in restrictions on the marketing of our products, and could include voluntary or mandatory recall or withdrawal of products from the market.

New government regulations may be enacted and changes in FDA policies and regulations and, their interpretation and enforcement, could prevent or delay regulatory approval of our products. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or abroad. Therefore, we do not know whether we will be able to continue to comply with any regulations or that the costs of such compliance will not have a material adverse effect on our future business, financial condition, and results of operations. If we are not able to maintain regulatory compliance, we will not be permitted to market our products and our business would suffer.

We may experience difficulties in manufacturing Microcyn, which could prevent us from commercializing one or more of our products.

The machines used to manufacture our Microcyn-based products are complex, use complicated software and must be monitored by highly trained engineers. Slight deviations anywhere in our manufacturing process, including quality control, labeling and packaging, could lead to a failure to meet the specifications required by the FDA, the Environmental Protection Agency, European notified bodies, Mexican regulatory agencies and other foreign regulatory bodies, which may result in lot failures or product recalls. If we are unable to obtain quality internal and external components, mechanical and electrical parts, if our software contains defects or is corrupted, or if we are unable to attract and retain qualified technicians to manufacture our products, our manufacturing output of Microcyn, or any other product candidate based on our platform that we may develop, could fail to meet required standards, our regulatory approvals could be delayed, denied or revoked, and commercialization of one or more of our Microcyn-based products may be delayed or foregone. Manufacturing processes that are used to produce the smaller quantities of Microcyn needed for clinical tests and current commercial sales may not be successfully scaled up to allow production of significant commercial quantities. Any failure to manufacture our products to required standards on a commercial scale could result in reduced revenues, delays in generating revenue and increased costs.

Our competitive position depends on our ability to protect our intellectual property and our proprietary technologies.

Our ability to compete and to achieve and maintain profitability depends on our ability to protect our intellectual property and proprietary technologies. We currently rely on a combination of patents, patent applications, trademarks, trade secret laws, confidentiality agreements, license agreements and invention assignment agreements to protect our intellectual property rights. We also rely upon unpatented know-how and continuing technological innovation to develop and maintain our competitive position. These measures may not be adequate to safeguard our Microcyn Technology. In addition, we granted a security interest in our assets, excluding our intellectual property under certain circumstances, under a loan and security agreement. If we do not protect our rights adequately, third parties could use our technology, and our ability to compete in the market would be reduced.

Although we have filed U.S. and foreign patent applications related to our Microcyn-based products, the manufacturing technology for making the products, and their uses, to date only two U.S. patents have been issued from these applications.

Our pending patent applications and any patent applications we may file in the future may not result in issued patents, and we do not know whether any of our in-licensed patents or any additional patents that might ultimately be issued by the U.S. Patent and Trademark Office or foreign regulatory body will protect our Microcyn technology. Any claims that are issued may not be sufficiently broad to prevent third parties from producing competing substitutes and may be infringed, designed around, or invalidated by third parties. Even issued patents may later be found to be invalid, or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. For example, our European patent that was issued on May 30, 2007, was revoked by the Opposition Division of the European Patent Office in December, 2009 following opposition proceedings instituted by a competitor.

The degree of future protection for our proprietary rights is more uncertain in part because legal means afford only limited protection and may not adequately protect our rights, and we will not be able to ensure that:

- we were the first to invent the inventions described in patent applications;
- we were the first to file patent applications for inventions;

- others will not independently develop similar or alternative technologies or duplicate our products without infringing our intellectual property rights;
- any patents licensed or issued to us will provide us with any competitive advantages;
- we will develop proprietary technologies that are patentable; or
- the patents of others will not have an adverse effect on our ability to do business.

The policies we use to protect our trade secrets may not be effective in preventing misappropriation of our trade secrets by others. In addition, confidentiality and invention assignment agreements executed by our employees, consultants and advisors may not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosures. We cannot be certain that the steps we have taken will prevent the misappropriation and use of our intellectual property in the United States, or in foreign countries where the laws may not protect our proprietary rights as fully as in the United States.

We may face intellectual property infringement claims that could be time-consuming, costly to defend and could result in our loss of significant rights and, in the case of patent infringement claims, the assessment of treble damages.

On occasion, we may receive notices of claims of infringement, misappropriation or misuse of other parties' proprietary rights. We may have disputes regarding intellectual property rights with the parties that have licensed those rights to us. We may also initiate claims to defend our intellectual property. Intellectual property litigation, regardless of its outcome, is expensive and time-consuming, could divert management's attention from our business and have a material negative effect on our business, operating results or financial condition. In addition, the outcome of such litigation may be unpredictable. If there is a successful claim of infringement against us, we may be required to pay substantial damages (including treble damages if we were to be found to have willfully infringed a third party's patent) to the party claiming infringement, develop non-infringing technology, stop selling our products or using technology that contains the allegedly infringing intellectual property or enter into royalty or license agreements that may not be available on acceptable or commercially practical terms, if at all. Our failure to develop non-infringing technologies or license the proprietary rights on a timely basis could harm our business. In addition, modifying our products to exclude infringing technologies could require us to seek re-approval or clearance from various regulatory bodies for our products, which would be costly and time consuming. Also, we may be unaware of pending patent applications that relate to our technology. Parties making infringement claims on future issued patents may be able to obtain an injunction that would prevent us from selling our products or using technology that contains the allegedly infringing intellectual property, which could harm our business.

Our ability to generate revenue will be diminished if we are unable to obtain acceptable prices or an adequate level of reimbursement from third-party payors of healthcare costs.

The continuing efforts of governmental and other third-party payors, including managed care organizations such as health maintenance organizations, or HMOs, to contain or reduce costs of health care may affect our future revenue and profitability, and the future revenue and profitability of our potential customers, suppliers and collaborative or license partners and the availability of capital. For example, in certain foreign markets, pricing or profitability of prescription pharmaceuticals is subject to government control. In the United States, governmental and private payors have limited the growth of health care costs through price regulation or controls, competitive pricing programs and drug rebate programs. Our ability to commercialize our products successfully will depend in part on the extent to which appropriate coverage and reimbursement levels for the cost of our Microcyn products and related treatment are obtained from governmental authorities, private health insurers and other organizations, such as HMOs.

There is significant uncertainty concerning third-party coverage and reimbursement of newly approved medical products and drugs. Third-party payors are increasingly challenging the prices charged for medical products and services. Also, the trend toward managed healthcare in the United States and the concurrent growth of organizations such as HMOs, as well as legislative proposals to reform healthcare or reduce government insurance programs, may result in lower prices for or rejection of our products. The cost containment measures that health care payors and providers are instituting and the effect of any health care reform could materially and adversely affect our ability to generate revenues.

In addition, given ongoing federal and state government initiatives directed at lowering the total cost of health care, the United States Congress and state legislatures will likely continue to focus on health care reform, the cost of prescription pharmaceuticals and the reform of the Medicare and Medicaid payment systems. While we cannot predict whether any proposed cost-containment measures will be adopted, the announcement or adoption of these proposals could reduce the price that we receive for our Microcyn products in the future.

We could be required to indemnify third parties for alleged infringement, which could cause us to incur significant costs.

Some of our distribution agreements contain commitments to indemnify our distributors against liability arising from infringement of third party intellectual property such as patents. We may be required to indemnify our customers for claims made against them or license fees they are required to pay. If we are forced to indemnify for claims or to pay license fees, our business and financial condition could be substantially harmed.

A significant part of our business is conducted outside of the United States, exposing us to additional risks that may not exist in the United States, which in turn could cause our business and operating results to suffer.

We have international operations in Mexico and Europe. During the year ended March 31, 2010 approximately 69% of our total revenues were generated from sales outside of the United States and during the year ended March 31, 2009, approximately 76% of our total revenues were generated from sales outside of the United States. Our business is highly regulated for the use, marketing and manufacturing of our Microcyn-based products both domestically and internationally. Our international operations are subject to risks, including:

- local political or economic instability;
- changes in governmental regulation;
- changes in import/export duties;
- trade restrictions;
- lack of experience in foreign markets;
- difficulties and costs of staffing and managing operations in certain foreign countries;
- work stoppages or other changes in labor conditions;
- difficulties in collecting accounts receivables on a timely basis or at all; and
- adverse tax consequences or overlapping tax structures.

We plan to continue to market and sell our products internationally to respond to customer requirements and market opportunities. We currently have international manufacturing facilities in Mexico and the United States. Establishing operations in any foreign country or region presents risks such as those described above as well as risks specific to the particular country or region. In addition, until a payment history is established over time with customers in a new geographical area or region, the likelihood of collecting receivables generated by such operations could be lower than our expectations. As a result, there is a greater risk that reserves set with respect to the collection of such receivables may be inadequate. If our operations in any foreign country are unsuccessful, we could incur significant losses and we may not achieve profitability.

In addition, changes in policies or laws of the United States or foreign governments resulting in, among other things, changes in regulations and the approval process, higher taxation, currency conversion limitations, restrictions on fund transfers or the expropriation of private enterprises, could reduce the anticipated benefits of our international expansion. If we fail to realize the anticipated revenue growth of our future international operations, our business and operating results could suffer.

Our sales in international markets subject us to foreign currency exchange and other risks and costs which could harm our business.

A substantial portion of our revenues are derived from outside the United States; primarily from Mexico. We anticipate that revenues from international customers will continue to represent a substantial portion of our revenues for the foreseeable future. Because we generate revenues in foreign currencies, we are subject to the effects of exchange rate fluctuations. The functional currency of our Mexican subsidiary is the Mexican Peso. For the preparation of our consolidated financial statements, the financial results of our foreign subsidiaries are translated into U.S. dollars on average exchange rates during the applicable period. If the U.S. dollar appreciates against the Mexican Peso or the Euro, as applicable, the revenues we recognize from sales by our subsidiaries will be adversely impacted. Foreign exchange gains or losses as a result of exchange rate fluctuations in any given period could harm our operating results and negatively impact our revenues. Additionally, if the effective price of our products were to increase as a result of fluctuations in foreign currency exchange rates, demand for our products could decline and adversely affect our results of operations and financial condition.

We rely on a number of key customers who may not consistently purchase our products in the future and if we lose any one of these customers, our revenues may decline.

Although we have a significant number of customers in each of the geographic markets that we operate in, we rely on certain key customers for a significant portion of our sales. During the year ended March 31, 2010 three customers represented 23% of sales, and during the year ended March 31, 2009, three customers represented 21% of sales. In the future, a small number of customers may continue to represent a significant portion of our total revenues in any given period. These customers may not consistently purchase our products at a particular rate over any subsequent period. A loss of any of these customers could adversely affect our revenues.

Negative economic conditions increase the risk that we could suffer unrecoverable losses on our customers' accounts receivable which would adversely affect our financial results.

We grant credit to our business customers, which are primarily located in Mexico, Europe and the United States. Collateral is generally not required for trade receivables. We maintain allowances for potential credit losses. Three customers represented a total of 42% of our net accounts receivable balance at March 31, 2010, and two customers represented 29% of our net accounts receivable balance at March 31, 2009. While we believe we have a varied customer base and have experienced strong collections in the past, if current economic conditions disproportionately impact any one of our key customers, including reductions in their purchasing commitments to us or their ability to pay their obligations, it could have a material adverse effect on our revenues and liquidity. We have not purchased insurance on our accounts receivable balances.

The loss of key members of our senior management team, one of our directors or our inability to retain highly skilled scientists, technicians and salespeople could adversely affect our business.

Our success depends largely on the skills, experience and performance of key members of our executive management team, including Hojabr Alimi, our Chief Executive Officer and Robert Northey, our Director of Research and Development. The efforts of these people will be critical to us as we continue to develop our products and attempt to commercialize products in the wound and skin care markets. If we were to lose one or more of these individuals, we may experience difficulties in competing effectively, developing our technologies and implementing our business strategies.

Our research and development programs depend on our ability to attract and retain highly skilled scientists and technicians. We may not be able to attract or retain qualified scientists and technicians in the future due to the intense competition for qualified personnel among medical technology businesses, particularly in the San Francisco Bay Area. We also face competition from universities and public and private research institutions in recruiting and retaining highly qualified personnel. In addition, our success depends on our ability to attract and retain salespeople with extensive experience in wound care and close relationships with the medical community, including physicians and other medical staff. We may have difficulties locating, recruiting or retaining qualified salespeople, which could cause a delay or decline in the rate of adoption of our products. If we are not able to attract and retain the necessary personnel to accomplish our business objectives, we may experience constraints that will adversely affect our ability to support our research, development and sales programs.

We maintain key-person life insurance only on Mr. Alimi. We may discontinue this insurance in the future, it may not continue to be available on commercially reasonable terms or, if continued, it may prove inadequate to compensate us for the loss of Mr. Alimi's services.

The wound care industry is highly competitive and subject to rapid technological change. If our competitors are better able to develop and market products that are less expensive or more effective than any products that we may develop, our commercial opportunity will be reduced or eliminated.

Our success depends, in part, upon our ability to stay at the forefront of technological change and maintain a competitive position. We compete with large healthcare, pharmaceutical and biotechnology companies, along with smaller or early-stage companies that have collaborative arrangements with larger pharmaceutical companies, academic institutions, government agencies and other public and private research organizations. Many of our competitors have significantly greater financial resources and expertise in research and development, manufacturing, pre-clinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. Our competitors may:

- develop and patent processes or products earlier than we will;
- develop and commercialize products that are less expensive or more efficient than any products that we may develop;
- obtain regulatory approvals for competing products more rapidly than we will; and
- improve upon existing technological approaches or develop new or different approaches that render our technology or products obsolete or non-competitive.

As a result, we may not be able to successfully commercialize any future products.

The success of our research and development efforts may depend on our ability to find suitable collaborators to fully exploit our capabilities. If we are unable to establish collaborations or if these future collaborations are unsuccessful, our research and development efforts may be unsuccessful, which could adversely affect our results of operations and financial condition.

An important element of our business strategy will be to enter into collaborative or license arrangements under which we license our Microcyn Technology to other parties for development and commercialization. We expect that while we may initially seek to conduct initial clinical trials on our drug candidates, we may need to seek collaborators for our drug candidates and for a number of our potential products because of the expense, effort and expertise required to conduct additional clinical trials and further develop those potential product candidates. Because collaboration arrangements are complex to negotiate, we may not be successful in our attempts to establish these arrangements. If we need third party assistance in identifying and negotiating one or more acceptable arrangements, it might be costly. Also, we may not have products that are desirable to other parties, or we may be unwilling to license a potential product because the party interested in it is a competitor. The terms of any arrangements that we establish may not be favorable to us. Alternatively, potential collaborators may decide against entering into an agreement with us because of our financial, regulatory or intellectual property position or for scientific, commercial or other reasons. If we are not able to establish collaborative agreements, we may not be able to develop and commercialize new products, which would adversely affect our business and our revenues.

In order for any of these collaboration or license arrangements to be successful, we must first identify potential collaborators or licensees whose capabilities complement and integrate well with ours. We may rely on these arrangements for not only financial resources, but also for expertise or economies of scale that we expect to need in the future relating to clinical trials, manufacturing, sales and marketing, and for licenses to technology rights. However, it is likely that we will not be able to control the amount and timing or resources that our collaborators or licensees devote to our programs or potential products. If our collaborators or licensees prove difficult to work with, are less skilled than we originally expected, or do not devote adequate resources to the program, the relationship will not be successful. If a business combination involving a collaborator or licensee and a third party were to occur, the effect could be to diminish, terminate or cause delays in development of a potential product.

If we are unable to comply with broad and complex federal and state fraud and abuse laws, including state and federal anti-kickback laws, we could face substantial penalties and our products could be excluded from government healthcare programs.

We are subject to various federal and state laws pertaining to healthcare fraud and abuse, which include, among other things, “anti-kickback” laws that prohibit payments to induce the referral of products and services, and “false claims” statutes that prohibit the fraudulent billing of federal healthcare programs. Our operations are subject to the Federal Anti-Kickback Statute, a criminal statute that, subject to certain statutory exceptions, prohibits any person from knowingly and willfully offering, paying, soliciting or receiving remuneration, directly or indirectly, to induce or reward a person either (i) for referring an individual for the furnishing of items or services for which payment may be made in whole or in part by a government healthcare program such as Medicare or Medicaid, or (ii) for purchasing, leasing, ordering or arranging for or recommending the purchasing, leasing or ordering of an item or service for which payment may be made under a government healthcare program. Because of the breadth of the federal anti-kickback statute, the Office of Inspector General of the U.S. Department of Health and Human Services, was authorized to adopt regulations setting forth additional exceptions to the prohibitions of the statute commonly known as “safe harbors.” If all of the elements of an applicable safe harbor are fully satisfied, an arrangement will not be subject to prosecution under the federal anti-kickback statute.

In addition, if there is a change in law, regulation or administrative or judicial interpretations of these laws, we may have to change our business practices or our existing business practices could be challenged as unlawful, which could have a negative effect on our business, financial condition and results of operations.

Healthcare fraud and abuse laws are complex, and even minor, inadvertent irregularities can potentially give rise to claims that a statute or regulation has been violated. The frequency of suits to enforce these laws has increased significantly in recent years and has increased the risk that a healthcare company will have to defend a false claim action, pay fines or be excluded from the Medicare, Medicaid or other federal and state healthcare programs as a result of an investigation arising out of such action. We cannot assure you that we will not become subject to such litigation. Any violations of these laws, or any action against us for violation of these laws, even if we successfully defend against it, could harm our reputation, be costly to defend and divert management's attention from other aspects of our business. Similarly, if the physicians or other providers or entities with which we do business are found to have violated abuse laws, they may be subject to sanctions, which could also have a negative impact on us.

Our efforts to discover and develop potential products may not lead to the discovery, development, commercialization or marketing of actual drug products.

We are currently engaged in a number of different approaches to discover and develop new product applications and product candidates. At the present time, we have one Microcyn-based drug candidate in clinical trials. We also have a non-Microcyn-based compound in the research and development phase. We believe this compound has potential applications in oncology. Discovery and development of potential drug candidates are expensive and time-consuming, and we do not know if our efforts will lead to discovery of any drug candidates that can be successfully developed and marketed. If our efforts do not lead to the discovery of a suitable drug candidate, we may be unable to grow our clinical pipeline or we may be unable to enter into agreements with collaborators who are willing to develop our drug candidates.

We must maintain expensive finance and accounting systems, procedures and controls to accommodate growth of our business and organization and to satisfy public company reporting requirements, which will increase our costs and require additional management resources.

As a public reporting company, we are required to comply with the Sarbanes-Oxley Act of 2002 and the related rules and regulations of the Securities and Exchange Commission. Section 404 of the Sarbanes-Oxley Act of 2002, or Section 404, requires our management to perform an annual assessment of our internal control over financial reporting. Compliance with Section 404 and other requirements of doing business as a public company have increased and will continue to increase our costs and require additional management resources to implement an ongoing program to perform system and process evaluation and testing of our internal controls. In the past, we entered into transactions that resulted in accounting consequences that we did not identify at the time of the transactions. As a result, our prior independent auditors informed us that we did not have the appropriate financial management and reporting structure in place to meet the demands of a public company and that our accounting and financial personnel lacked the appropriate level of accounting knowledge, experience and training. In calendar year 2006, our current independent auditors recommended certain changes which, in addition to other changes in our financial reporting and management structure, have been implemented at additional cost. We have upgraded our accounting systems, procedures and controls and will need to continue to implement additional finance and accounting systems, procedures and controls as we grow our business and organization, enter into complex business transactions and take actions designed to satisfy reporting requirements. Our management has concluded that our internal controls are adequate to meet the required Section 404 assessment. If we are unable to complete the required Section 404 assessment as to adequacy of our internal control over financial reporting in future Form 10-K filings, our ability to obtain additional financing could be impaired. In addition, investors could lose confidence in the reliability of our internal control over financial reporting and in the accuracy of our periodic reports filed under the Securities Exchange Act of 1934. A lack of investor confidence in the reliability and accuracy of our public reporting could cause our stock price to decline.

We may not be able to maintain sufficient product liability insurance to cover claims against us.

Product liability insurance for the healthcare industry is generally expensive to the extent it is available at all. We may not be able to maintain such insurance on acceptable terms or be able to secure increased coverage if the commercialization of our products progresses, nor can we be sure that existing or future claims against us will be covered by our product liability insurance. Moreover, the existing coverage of our insurance policy or any rights of indemnification and contribution that we may have may not be sufficient to offset existing or future claims. A successful claim against us with respect to uninsured liabilities or in excess of insurance coverage and not subject to any indemnification or contribution could have a material adverse effect on our future business, financial condition, and results of operations.

Risks Related to Our Common Stock

Our operating results may fluctuate, which could cause our stock price to decrease.

Fluctuations in our operating results may lead to fluctuations, including declines, in our share price. Our operating results and our share price may fluctuate from period to period due to a variety of factors, including:

- demand by physicians, other medical staff and patients for our Microcyn-based products;
- reimbursement decisions by third-party payors and announcements of those decisions;
- clinical trial results and publication of results in peer-reviewed journals or the presentation at medical conferences;
- the inclusion or exclusion of our Microcyn-based products in large clinical trials conducted by others;
- actual and anticipated fluctuations in our quarterly financial and operating results;
- developments or disputes concerning our intellectual property or other proprietary rights;
- issues in manufacturing our product candidates or products;
- new or less expensive products and services or new technology introduced or offered by our competitors or us;
- the development and commercialization of product enhancements;
- changes in the regulatory environment;
- delays in establishing new strategic relationships;
- costs associated with collaborations and new product candidates;
- introduction of technological innovations or new commercial products by us or our competitors;
- litigation or public concern about the safety of our product candidates or products;
- changes in recommendations of securities analysts or lack of analyst coverage;
- failure to meet analyst expectations regarding our operating results;
- additions or departures of key personnel; and
- general market conditions.

Variations in the timing of our future revenues and expenses could also cause significant fluctuations in our operating results from period to period and may result in unanticipated earning shortfalls or losses. In addition, the NASDAQ Capital Market, in general, and the market for life sciences companies, in particular, have experienced significant price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies.

If an active, liquid trading market for our common stock does not develop, you may not be able to sell your shares quickly or at or above the price you paid for it.

Although our common stock is listed on the NASDAQ Capital Market, an active and liquid trading market for our common stock has not yet and may not ever develop or be sustained. You may not be able to sell your shares quickly or at or above the price you paid for our stock if trading in our stock is not active.

Anti-takeover provisions in our charter and by-laws and under Delaware law may make it more difficult for stockholders to change our management and may also make a takeover difficult.

Our corporate documents and Delaware law contain provisions that limit the ability of stockholders to change our management and may also enable our management to resist a takeover. These provisions include:

- the ability of our board of directors to issue and designate the rights of, without stockholder approval, up to 5,000,000 shares of convertible preferred stock, which rights could be senior to those of common stock;
- limitations on persons authorized to call a special meeting of stockholders; and
- advance notice procedures required for stockholders to make nominations of candidates for election as directors or to bring matters before meetings of stockholders.

These provisions might discourage, delay or prevent a change of control in our management. These provisions could also discourage proxy contests and make it more difficult for you and other stockholders to elect directors and cause us to take other corporate actions. In addition, the existence of these provisions, together with Delaware law, might hinder or delay an attempted takeover other than through negotiations with our board of directors.

Our stockholders may experience substantial dilution in the value of their investment if we issue additional shares of our capital stock or other securities convertible into common stock.

Our charter allows us to issue up to 100,000,000 shares of our common stock and to issue and designate the rights of, without stockholder approval, up to 5,000,000 shares of convertible preferred stock. In the event we issue additional shares of our capital stock, dilution to our stockholders could result. In addition, if we issue and designate a class of convertible preferred stock, these securities may provide for rights, preferences or privileges senior to those of holders of our common stock.

FORWARD-LOOKING STATEMENTS

When used in this prospectus, the words “expects,” “believes,” “anticipates,” “estimates,” “may,” “could,” “intends,” and similar expressions are intended to identify forward-looking statements. These statements are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from those projected or otherwise implied by the forward-looking statements. These forward-looking statements speak only as of the date of this prospectus. Given these risks and uncertainties, you should not place undue reliance on these forward-looking statements. We have discussed many of these risks and uncertainties in greater detail in any prospectus supplement under the heading “Risk Factors.” Additional cautionary statements or discussions of risks and uncertainties that could affect our results or the achievement of the expectations described in forward-looking statements may also be contained in the documents we incorporate by reference into this prospectus.

These forward-looking statements speak only as of the date of this prospectus. We expressly disclaim any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in our expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based. You should, however, review additional disclosures we make in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K filed with the SEC.

USE OF PROCEEDS

Unless we state otherwise in the accompanying prospectus supplement, we intend to use the net proceeds from the sale of the securities offered by this prospectus for general corporate purposes. General corporate purposes may include clinical trials, additions to working capital, research and development, financing of capital expenditures, repayment or redemption of existing indebtedness, and future acquisitions and strategic investment opportunities. Pending the application of net proceeds, we expect to invest the net proceeds in interest-bearing securities.

DESCRIPTION OF COMMON STOCK

This section describes the general terms and provisions of the shares of our common stock, par value $0.0001 per share. This description is only a summary and is qualified in its entirety by reference to the description of our common stock incorporated by reference in this prospectus. Our Restated Certificate of Incorporation and our Amended and Restated Bylaws, as Amended have been filed as exhibits to our periodic reports filed with the SEC, which are incorporated by reference in this prospectus. You should read our Restated Certificate of Incorporation and our Amended and Restated Bylaws, as Amended for additional information before you buy any of our common stock or other securities. See “Where You Can Find More Information.”

We have 100,000,000 shares of authorized common stock. As of December 21, 2010, there were 26,463,726 shares of common stock issued and outstanding. Each holder of common stock is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. We have not provided for cumulative voting for the election of directors in our Restated Certificate of Incorporation. This means that the holders of a majority of the shares voted can elect all of the directors then standing for election. Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of our common stock are entitled to receive dividends out of assets legally available at the times and in the amounts that our board of directors may determine from time to time. Upon our liquidation, dissolution or winding-up, the holders of common stock are entitled to share ratably in all assets remaining after payment of all liabilities and the liquidation preferences of any outstanding preferred stock. Holders of common stock have no preemptive or conversion rights or other subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and nonassessable, and the shares of common stock offered, when issued, will be fully paid and nonassessable.

Certain Provisions of Delaware Law and of the Charter and Bylaws

The provisions of Delaware law, our Restated Certificate of Incorporation and our Amended and Restated Bylaws, as Amended described below may have the effect of delaying, deferring or discouraging another party from acquiring control of us.

Delaware Law. We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, those provisions prohibit a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the date that the stockholder became an interested stockholder, unless:

- the transaction is approved by the board before the date the interested stockholder attained that status;
- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- on or after the date the business combination is approved by the board and authorized at a meeting of stockholders by at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 defines "business combination" to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by any of these entities or persons.

A Delaware corporation may opt out of these provisions either with an express provision in its original certificate of incorporation or in an amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out, and do not currently intend to opt out of, these provisions. The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us.

Charter and Bylaws. Our Restated Certificate of Incorporation and Amended and Restated Bylaws, as Amended provide that:

- our bylaws may be amended or repealed only by a two-thirds vote of our board of directors or a two-thirds stockholder vote;
- no action can be taken by stockholders except at an annual or special meeting of the stockholders called in accordance with our bylaws, and stockholders may not act by written consent;
- stockholders may not call special meetings of the stockholders or fill vacancies on the board;
- the approval of holders of two-thirds of the shares entitled to vote at an election of directors is required to amend or repeal the provisions of our Restated Certificate of Incorporation regarding the inability of stockholders to take action by written consent;
- our board of directors is authorized to issue preferred stock without stockholder approval; and
- we will indemnify officers and directors against losses that they may incur in investigations and legal proceedings resulting from their services to us, which may include services in connection with takeover defense measures.

DESCRIPTION OF PREFERRED STOCK

As of December 23, 2010, our authorized preferred stock, par value $0.0001 per share, was 5,000,000 shares, none of which were issued and outstanding. We may issue preferred stock, in series, with such designations, powers, preferences and other rights and qualifications, limitations or restrictions as our board of directors may authorize, without further action by our stockholders, including:

- the distinctive designation of each series and the number of shares that will constitute the series;
- the voting rights, if any, of shares of the series and the terms and conditions of the voting rights;
- the dividend rate on the shares of the series, the dates on which dividends are payable, any restriction, limitation or condition upon the payment of dividends, whether dividends will be cumulative, and the dates from and after which dividends shall accumulate;
- the prices at which, and the terms and conditions on which, the shares of the series may be redeemed, if the shares are redeemable;
- the terms and conditions of a sinking or purchase fund for the purchase or redemption of shares of the series, if such a fund is provided;
- any preferential amount payable upon shares of the series in the event of the liquidation, dissolution or winding up of, or upon the distribution of any of our assets; and
- the prices or rates of conversion or exchange at which, and the terms and conditions on which, the shares of the series may be converted or exchanged into other securities, if the shares are convertible or exchangeable.

The particular terms of any series of preferred stock, and the transfer agent and registrar for that series, will be described in a prospectus supplement. All preferred stock offered, when issued, will be fully paid and nonassessable. Any material United States federal income tax consequences and other special considerations with respect to any preferred stock offered under this prospectus will also be described in the applicable prospectus supplement.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of preferred stock, common stock, or any combination thereof. We may issue warrants independently or together with any other securities offered by any prospectus supplement and may be attached to or separate from the other offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into by us with a warrant agent. The warrant agent will act solely as our agent in connection with the warrants and will not assume any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. Further terms of the warrants and the applicable warrant agreements will be set forth in the applicable prospectus supplement.

The applicable prospectus supplement relating to any particular issue of warrants will describe the terms of the warrants, including, as applicable, the following:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, terms and number of shares of preferred stock or common stock purchasable upon exercise of the warrants;
- the designation and terms of the offered securities, if any, with which the warrants are issued and the number of the warrants issued with each offered security;
- the date, if any, on and after which the warrants and the related preferred stock or common stock will be separately transferable;
- the price at which each share of preferred stock or common stock purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants shall commence and the date on which that right shall expire;
- the minimum or maximum amount of the warrants which may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- a discussion of certain federal income tax considerations; and
- any other terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

We and the warrant agent may amend or supplement the warrant agreement for a series of warrants without the consent of the holders of the warrants issued thereunder to effect changes that are not inconsistent with the provisions of the warrants and that do not materially and adversely affect the interests of the holders of the warrants.

DESCRIPTION OF UNITS

As specified in the applicable prospectus supplement, we may issue units consisting of one or more shares of common stock or preferred stock, warrants or any combination of such securities. In addition, the prospectus supplement relating to units will describe the terms of any units we issue, including as applicable:

- the designation and terms of the units and the securities included in the units;
- any provision for the issuance, payment, settlement, transfer or exchange of the units;
- the date, if any, on and after which the units may be transferable separately;
- whether we will apply to have the units traded on a securities exchange or securities quotation system;
- any material United States federal income tax consequences; and

- how, for United States federal income tax purposes, the purchase price paid for the units is to be allocated among the component securities.

PLAN OF DISTRIBUTION

We may sell the securities offered by this prospectus to one or more underwriters or dealers for public offering and sale by them or to investors directly or through agents. The accompanying prospectus supplement will set forth the terms of the offering and the method of distribution and will identify any firms acting as underwriters, dealers or agents in connection with the offering, including:

- the name or names of any underwriters, dealers or agents;
- the purchase price of the securities and the proceeds to us from the sale;
- any underwriting discounts and other items constituting compensation to underwriters, dealers or agents;
- any public offering price;
- any discounts or concessions allowed or re-allowed or paid to dealers; and
- any securities exchange or market on which the securities offered in the prospectus supplement may be listed.

Only those underwriters identified in such prospectus supplement are deemed to be underwriters in connection with the securities offered in the prospectus supplement.

The distribution of the securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, or at prices determined as the applicable prospectus supplement specifies. The securities may be sold through a rights offering, forward contracts or similar arrangements. In connection with the sale of the securities, underwriters, dealers or agents may be deemed to have received compensation from us in the form of underwriting discounts or commissions and also may receive commissions from securities purchasers for whom they may act as agent. Underwriters may sell the securities to or through dealers, and the dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters or commissions from the purchasers for whom they may act as agent. Some of the underwriters, dealers or agents who participate in the securities distribution may engage in other transactions with, and perform other services for, us or our subsidiaries in the ordinary course of business.

We will provide in the applicable prospectus supplement information regarding any underwriting discounts or other compensation that we pay to underwriters or agents in connection with the securities offering, and any discounts, concessions or commissions which underwriters allow to dealers. Underwriters, dealers and agents participating in the securities distribution may be deemed to be underwriters, and any discounts and commissions they receive and any profit they realize on the resale of the securities may be deemed to be underwriting discounts and commissions under the Securities Act of 1933. Underwriters and their controlling persons, dealers and agents may be entitled, under agreements entered into with us, to indemnification against and contribution toward specific civil liabilities, including liabilities under the Securities Act.

The securities may or may not be listed on a national securities exchange. In connection with an offering, the underwriters may purchase and sell securities in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of securities than they are required to purchase in an offering. Stabilizing transactions consist of bids or purchases made for the purpose of preventing or retarding a decline in the market price of the securities while an offering is in progress. The underwriters also may impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the underwriters have repurchased securities sold by or for the account of that underwriter in stabilizing or short-covering transactions. These activities by the underwriters may stabilize, maintain or otherwise affect the market price of the securities. As a result, the price of the securities may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued by the underwriters at any time.

LEGAL MATTERS

The validity of any securities offered by this prospectus will be passed upon for us by Trombly Business Law, PC.

EXPERTS

The consolidated financial statements of Oculus Innovative Sciences, Inc. and Subsidiaries. appearing in Oculus Innovative Sciences, Inc.'s Annual Report on Form 10-K for the year ended March 31, 2010, have been audited by Marcum LLP, an independent registered public accounting firm, as set forth in their report included therein and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other documents with the SEC. You may read and copy any document we file at the SEC's public reference room at 100 F Street, N.E., Washington, D.C. 20549. You should call 1-800-SEC-0330 for more information on the public reference room. Our SEC filings are also available to you on the SEC's Internet site at http://www.sec.gov.

This prospectus is part of a Registration Statement that we filed with the SEC. The Registration Statement contains more information than this prospectus regarding us and our common stock, including certain exhibits and schedules. You can obtain a copy of the Registration Statement from the SEC at the address listed above or from the SEC's Internet site.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC requires us to "incorporate by reference" the information contained in documents we file with the SEC. This means that we can disclose important information to you by referring to other documents that contain that information. The information incorporated by reference is considered to be part of this prospectus. Information contained in this prospectus and information that we file with the SEC in the future and incorporate by reference in this prospectus automatically updates and supersedes previously filed information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, prior to the sale of all the shares covered by this prospectus:

- our Annual Report on Form 10-K for the year ended March 31, 2010, filed on June 8, 2010;
- our Quarterly Reports on Form 10-Q for the quarter ended June 30, 2010, filed on August 5, 2010, the quarter ended September 30, 2010, filed on November 4, 2010, and the quarter ended December 31, 2010, filed February 4, 2011;
- our Current Reports on Form 8-K, filed on April 2, 2010, May 6, 2010, September 17, 2010, and February 18, 2011;
- our Proxy Statement on Schedule 14A filed on July 29, 2010; and
- the description of our common stock contained in our Registration Statement on Form 8-A filed on December 15, 2006, including any amendment or report filed for the purpose of updating such description.

In addition, all documents that we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Securities and Exchange Act of 1934, as amended, after the date of the initial registration statement of which this prospectus is a part and prior to the effectiveness of the registration statement as well as all such documents that we file with the SEC after the date of this prospectus and before the termination of the offering of our securities shall be deemed incorporated by reference into this prospectus and to be a part of this prospectus from the respective dates of filing such documents. Unless specifically stated to the contrary, none of the information that we disclose under Items 2.02 or 7.01 of any Current Report on Form 8-K that we may from time to time furnish to the SEC will be incorporated by reference into, or otherwise included in, this prospectus.

You may request a copy of any or all of the documents incorporated by reference but not delivered with this prospectus, at no cost, by writing or telephoning us at the following address and number: Investor Relations, Oculus Innovative Sciences, Inc., 1129 N. McDowell Blvd., Petaluma, California 94954, telephone (707) 782-0792. We will not, however, send exhibits to those documents, unless the exhibits are specifically incorporated by reference in those documents.

$5,161,000

Common Stock

PROSPECTUS SUPPLEMENT

MLV & Co

April _, 2014