

PURE BIOSCIENCE, INC.

Form 424B5

September 04, 2012

The information in this preliminary prospectus supplement and the accompanying prospectus, relating to an effective registration statement under the Securities Act of 1933, as amended, is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus do not constitute an offer to sell these securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

Filed Pursuant to Rule 424(b)(5)

Registration No. 333-182475

PRELIMINARY PROSPECTUS **SUBJECT TO COMPLETION** **DATED SEPTEMBER 4, 2012**

(To The Prospectus dated July 31, 2012)

\$ _____ of Common Stock

We are offering \$ _____ of our common stock. Our common stock is listed on the NASDAQ Capital Market under the symbol "PURE". On August 31, 2012, the last reported sale price of our common stock on the NASDAQ Capital Market was \$2.81 per share.

As of August 31, 2012 the aggregate market value of our outstanding common stock held by non-affiliates was \$19,295,809 based on 7,219,617 shares of outstanding common stock, of which 6,866,836 shares are held by non-affiliates, and a per share price of \$2.81. Following this offering and assuming the full exercise of the underwriter's over-allotment option, we will have sold securities with an aggregate market value of \$_____,_____,____ 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 hereof.

Investing in our common stock involves a high degree of risk. Please read "Risk Factors" beginning on page S-9 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement and the accompanying prospectus.

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 are truthful or complete. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public Offering Price	\$	\$
Underwriting Discount(1)	\$	\$
Proceeds to us before expenses(2)	\$	\$

(1) See "Underwriting" beginning on page S-12 for a detailed description of the compensation payable to the underwriter.

(2) We estimate that the total expenses of this offering will approximate \$200,000.

The underwriter may purchase up to an additional _____ shares from us at the public offering price, less the underwriting discount, within 45 days from the date of this prospectus supplement to cover over-allotments, if any.

The underwriter expects to deliver the shares against payment on or about September _____, 2012.

Aegis Capital Corp

September __, 2012

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of the offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part, the accompanying prospectus dated July 31, 2012, including the documents incorporated by reference, provides more general information, some of which does not apply to this offering. Generally, when we refer to this prospectus supplement, we are referring to both parts of this document combined together with all documents incorporated by reference. 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 in any document incorporated by reference that was filed with the Securities and Exchange Commission before the date of this prospectus supplement, on the other hand, you should rely on the information in this prospectus supplement. If any statement in one of these documents is inconsistent with a statement in another document having a later date—for example, a document incorporated by reference in the accompanying prospectus—the statement in the document having the later date modifies or supersedes the earlier statement. You should read this prospectus supplement and the accompanying prospectus, including the information incorporated by reference, in their entirety before making an investment decision.

We have not authorized anyone to provide you with different or additional information. You should assume that the information appearing in this prospectus supplement, the accompanying prospectus, the documents incorporated by reference in this prospectus supplement and the accompanying prospectus is accurate only as of the respective dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

The shares are being offered and sold only in jurisdictions where such offers and sales are permitted. The distribution of this prospectus supplement and the accompanying prospectus and the offering of the shares in certain jurisdictions or to certain persons within such jurisdictions may be restricted by law. Persons outside the United States who come into possession of this prospectus supplement and the accompanying prospectus must inform themselves about and observe any restrictions relating to the offering of the shares and the distribution of this prospectus supplement and the accompanying prospectus outside the United States. This prospectus supplement and the accompanying prospectus do not constitute, and may not be used in connection with, an offer to sell, or a solicitation of an offer to buy, any securities offered by this prospectus supplement and the accompanying prospectus in any jurisdiction in which it is unlawful to make such an offer or solicitation.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference in this prospectus supplement or the accompanying prospectus were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties, and covenants were accurate only as of the date when made; therefore, such representations, warranties, and covenants should not be relied on as accurate representations of the current state of our affairs.

Unless otherwise indicated or unless the context requires otherwise, all references in this prospectus supplement and accompanying prospectus to “we,” “us” and “our” refer collectively to PURE Bioscience, Inc.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, and accompanying prospectus, and the documents we incorporate by reference herein contain forward-looking statements within the meaning of Sections 27A of the Securities Act of 1933, as amended, which we refer to as the “Securities Act,” and 21E of the Exchange Act. Such statements involve known and unknown risks, including, among others, risks resulting from economic and market conditions, the regulatory environment in

which we operate, pricing pressures, accurately forecasting operating and capital expenditures, competitive activities, uncertainties of litigation and other business conditions, and are subject to uncertainties and assumptions contained elsewhere in this prospectus. We base our forward-looking statements on information currently available to us, and, in accordance with the requirements of federal securities laws, we will disclose to you material developments affecting such statements. Our actual operating results and financial performance may prove to be very different from what we have predicted as of the date of this prospectus due to certain risks and uncertainties. The risks described in the section entitled “Risk Factors” specifically address some of the factors that may affect our future operating results and financial performance.

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You should not place undue reliance on our forward-looking statements because the matters they describe are subject to known and unknown risks, uncertainties and other unpredictable factors, many of which are beyond our control. Our forward-looking statements are based on the information currently available to us and speak only as of the date on the cover of this prospectus. New risks and uncertainties arise from time to time, and it is impossible for us to predict these matters or how they may affect us. Over time, our actual results, performance, or achievements will likely differ from the anticipated results, performance or achievements that are expressed or implied by our forward-looking statements, and such differences might be significant and materially adverse to our investors. We have no duty to, and do not intend to, update or revise the forward-looking statements in this prospectus after the date of this prospectus except to the extent required by the federal securities laws. You should consider all risks and uncertainties disclosed in our filings with the Securities and Exchange Commission, or the SEC, described below under the heading “Where You Can Find More Information,” all of which are accessible on the SEC’s website at www.sec.gov.

PROSPECTUS SUPPLEMENT SUMMARY

The following summary of our business highlights some of the information contained elsewhere in or incorporated by reference into this prospectus supplement. Because this is only a summary, however, it does not contain all of the information that may be important to you. You should carefully read this prospectus supplement and the accompanying prospectus, including the documents incorporated by reference, which are described under “Incorporation of Certain Information by Reference” in this prospectus supplement and under “Incorporation of Certain Information by Reference” and “Where You Can Find More Information” in the accompanying prospectus. You should also carefully consider the matters discussed in the section in this prospectus supplement entitled “Risk Factors” and in the accompanying prospectus and in other periodic reports incorporated herein by reference.

Business Overview

PURE Bioscience, Inc. (“we,” “us,” or “our”) is focused on the discovery, development, and commercialization of bioscience products that provide solutions to global health challenges. Our technology platform is based on stabilized ionic silver, and our initial products contain silver dihydrogen citrate, or SDC. SDC is a broad-spectrum, non-toxic antimicrobial. We manufacture and sell SDC-based disinfecting and sanitizing products, which are registered by the Environmental Protection Agency, or EPA, to distributors and end users. We also manufacture and sell various SDC-based formulations to manufacturers for use as a raw material in the production of personal care and other products. We believe our technology platform has potential application in a number of industries, and we have ongoing research and development projects in food processing, agriculture, water treatment, pharmaceuticals, and oil and gas.

Our goal is to become a sustainable company by using our proprietary technology platform to deliver leading antimicrobial products to multiple industries. We manufacture and sell SDC-based products for end use, and as a raw material for manufacturing use. Our current products are as follows:

Product Name	Product Use	EPA Registration
PURE® Hard Surface	Disinfectant and sanitizer	SDC3A
Axen® 30	Disinfectant	Axen30
Silvérion®	Raw material	Not applicable
Axenohl®	Raw material	Axenohl

PURE® Hard Surface

PURE® Hard Surface is our patented and EPA-registered hard surface disinfectant and food contact surface sanitizer. We manufacture both consumer and commercial versions of the product. PURE Hard Surface combines high efficacy and low toxicity with 30-second bacterial and viral kill times and 24-hour residual protection. The product completely kills resistant pathogens such as MRSA and Carbapenem-resistant *Klebsiella pneumoniae* (NDM-1), and effectively eliminates dangerous fungi and viruses including HIV, Hepatitis B, Hepatitis C, Norovirus, Influenza A, Avian Influenza and H1N1. It also eradicates hazardous food pathogens such as *E. coli*, *Salmonella*, *Campylobacter* and *Listeria*. PURE Hard Surface delivers broad-spectrum efficacy yet remains classified as least-toxic by the EPA. The active ingredient, SDC, has been designated as Generally Recognized as Safe, or GRAS, for use on food processing equipment, machinery and utensils.

Axen® 30

Axen®30 is our patented and EPA-registered hard surface disinfectant and is a predecessor product to PURE Hard Surface. Axen®30 is sold by distributors under the private label brands SpectraSan24, PureGreen24, Critical Care, Mother Nature's Choice, Ag+ainst24 and IV-7. In prior years, we sold this product to other distributors that resold Axen30 under a variety of other private label brands.

Silvérion®

Silvérion® is our patented antimicrobial formulation for use as a raw material in the manufacturing of personal care products. It can be used as either an active ingredient or a preservative. Silvérion is a colorless, odorless and stable solution that provides ionic silver in a water-soluble form. It provides fast acting efficacy at low concentrations against a broad-spectrum of bacteria, viruses, yeast and molds.

Axenohl®

Axenohl® is our patented and EPA-registered antimicrobial formulation for use as a raw material in the manufacturing of EPA-registered products. Axenohl is a colorless, odorless and stable solution that provides fast acting efficacy against bacteria, viruses and fungi when manufactured into consumer and commercial disinfecting and sanitizing products.

We own the registered trademarks or pending trademark applications for PURE Bioscience®, Powered by SDC Ag+®, Staph Attack®, Staphacide®, Axenohl®, Axen®, Silvérion®, Kinderguard®, Cruise Control®, Nutripure™, Elderguard®, and Critterguard®, among others. In addition, we have applications for other trademarks, tradenames and service marks pending in countries outside of the United States. All other trademarks, tradenames and service marks included in this prospectus, or any related prospectus supplement or free writing prospectus, are the property of their respective owners.

We recently launched our PURE Multi-Purpose Cleaner Concentrate and PURE Floor Cleaner Concentrate as companion products to PURE Hard Surface disinfectant and food contact surface sanitizer. The three products comprise the PURE Complete System, which offers a comprehensive, cost-effective and user-friendly product line to end-users, janitorial service providers and the distributors that supply them.

We recently added the following new distributors:

1. AHI Facility Services, Inc.: We secured AHI as a regional strategic customer in the contract facilities market. AHI clients using PURE products include the corporate headquarters of Fossil, Inc.; Dr. Pepper Snapple Group, Inc.; McAfee, an Intel Company; and Dell Inc., as well as Metrocrest Hospital Authority, First United Methodist Church of Plano, and Northwood Church in Keller, Texas.
2. Intercon Chemical: We partnered with St. Louis-based Intercon Chemical Company for distribution of the PURE Complete System. Intercon has an established network of more than 200 distributors which service approximately

250,000 end-use customers. As a result of this relationship, Intercon Chemical promoted the PURE Complete System at the May 2012 National Restaurant Association Show, and also featured the PURE Complete System in June at APIC 2012, the annual conference of the Association for Professionals in Infection Control and Epidemiology.

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Recent Developments

NASDAQ Delisting Notifications

In April 2008, we obtained a listing for our common stock on the NASDAQ Capital Market. In order to maintain our listing, we must meet certain listing standards that include maintaining minimum thresholds of stockholders' equity, market value of our listed or publicly held securities, number of publicly held shares, bid price for our common stock, number of stockholders, number of market makers, and our net income. In addition, certain of our corporate governance policies are required to remain compliant with standards determined, and amended from time to time, by the NASDAQ Stock Market, or NASDAQ.

On September 16, 2011, we received a deficiency letter, or the Notification Letter, from NASDAQ notifying us that our common stock no longer met NASDAQ's requirements for continued listing on the NASDAQ Capital Market under NASDAQ Listing Rule 5550(a)(2), or the Bid Price Rule, because the minimum bid price of our common stock did not equal or exceed \$1.00 at least once over a period of 30 consecutive trading days prior to the date of the Notification Letter. Under NASDAQ Listing Rule 5810(c)(3)(A), we were afforded 180 calendar days, or until March 14, 2012, to regain compliance with the Bid Price Rule. We did not regain compliance with the Bid Price Rule by such date because the closing bid price of its common stock did not meet or exceed \$1.00 per share for at least 10 consecutive business days during the applicable 180-day period. Accordingly, on March 15, 2012, we received from NASDAQ a second deficiency letter, or the Second Notification Letter, notifying us that our common stock continued to be at risk of delisting from the NASDAQ Capital Market. As described in the Second Notification Letter, we were not eligible for an additional grace period to regain compliance with the Bid Price Rule because, based on market information at that time and our stockholders' equity as reported in its Quarterly Report on Form 10-Q for the period ended October 31, 2011, we did not satisfy all applicable requirements for listing on the NASDAQ Capital Market under NASDAQ Listing Rule 5505. On March 23, 2012, we received from NASDAQ an additional deficiency letter, or the Third Deficiency Letter, notifying us that, based on our stockholders' equity as reported in our Quarterly Report on Form 10-Q for the period ended January 31, 2012, we did not satisfy the minimum stockholders' equity for continued listing on the NASDAQ Capital Market under NASDAQ Listing Rule 5550(b)(1), and that such failure served as an additional basis for delisting our common stock.

In accordance with NASDAQ's applicable procedures, we appealed NASDAQ's delisting determination by submitting to NASDAQ a written plan of compliance, which included our commitment to implement a reverse stock split of its common stock, and appearing before a NASDAQ Hearings Panel, or the Panel, at an oral hearing on May 17, 2012.

On June 21, 2012, we received from NASDAQ its decision letter, or the Decision Letter, regarding our appeal of the delisting determination, which notified us that the Panel has granted our request to remain listed on the NASDAQ Capital Market subject to our satisfaction of certain conditions specified in the Decision Letter. Among those conditions are that (i) we file a preliminary proxy statement no later than June 26, 2012 in order attempt to obtain the approval of our stockholders of a reverse stock split, (ii) we are able to consummate certain capital-raising transactions in accordance with specified deadlines provided in the Decision Letter, (iii) on or before August 20, 2012, we provide evidence to the Panel that the closing bid price of our common stock has been \$1.00 or more for a minimum of ten consecutive trading days, and (iv) we keep NASDAQ updated regarding our progress toward satisfying the conditions set forth in (i), (ii) and (iii) above.

We filed our preliminary proxy statement with the Securities and Exchange Commission on June 25, 2012, in compliance with the timing requirement therefor set forth in the Decision Letter. We closed certain capital-raising activities in order to attempt to satisfy the requirements set forth in the Decision Letter relating to such transactions, though we did not satisfy the requirements established in the Decision Letter.

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On August 2, 2012, we received from NASDAQ a fourth deficiency letter (the “Fourth Deficiency Letter”) notifying us that NASDAQ had determined that we violated the shareholder approval rules in Listing Rule 5635(d)(2), and that such failure served as an additional basis for delisting our common stock. This determination was based upon NASDAQ’s conclusion that three separate capital raising transactions should be aggregated as one transaction, and resulting in a potential issuance of greater than 20% of the pre-transaction shares outstanding at a price less than the greater of book or market value. As a result, NASDAQ determined that we violated the NASDAQ shareholder approval rules because the transactions could result in an issuance of greater than 20% at a discount to market value. In addition, the Fourth Deficiency Letter noted our failure to publicly announce the conclusion of a public offering resulting in proceeds that would result in stockholders’ equity above \$2.5 million by a specified deadline.

The Fourth Deficiency Letter gave us until August 9, 2012 to present our views in writing to the NASDAQ Hearings Panel (the “Panel”) regarding the latest deficiency. We have submitted our written views to the Panel. On August 10, 2012, we received from NASDAQ another decision letter (the “Latest Decision Letter”) regarding our appeal of the delisting determination, which notified us that the Panel has granted our request to remain listed on the NASDAQ Capital Market subject to our satisfaction of certain conditions specified in the Latest Decision Letter. Among those conditions are that (i) we complete the Reverse Stock Split discussed below; (ii) the Bridge Loan discussed below be amended as soon as practicable to limit the number of shares that we may issue under that transaction to 9.1% of the total shares outstanding as of June 03, 2012; (iii) we close on or before August 24, 2012 a public offering transaction resulting in stockholders’ equity in excess of \$2.5 million; (iv) we provide to NASDAQ no later than August 24, 2012 all assumptions clearly stated, showing stockholders’ equity above \$2.5 million over the coming year; and, (v) we shall have evidenced on or before August 24, 2012 a closing bid price of \$1.00 or more for our common stock for a minimum of ten prior consecutive trading days.

We have since effected a Reverse Stock Split, as discussed below, to regain compliance with the Bid Price Rule and have taken action to satisfy the requirements of the Panel with regard to the aggregation of prior transactions. The investors in the Bridge Loan have agreed to the limit the total number of shares to be issued to them under the Bridge Loan to a total of 9% of our total shares outstanding on June 3, 2012 unless and until approved by our shareholders. We are also working on the other requirements established by NASDAQ and we are in contact with NASDAQ to gain additional time in which to satisfy the other requirements. On August 24, 2012 we requested that the Panel grant us an extension to comply with the conditions set forth on the latest deficiency letter. As of the date of this prospectus, we have not received a written response from the Panel. We intend to make diligent efforts to satisfy all requirements set forth by the Panel in order to maintain our NASDAQ listing. However, these efforts may not be successful and our common stock may nevertheless be delisted from the NASDAQ Capital Market. Even if we regain compliance with the continued listing standards, we cannot provide any assurance that we will remain in compliance in the future.

If our common stock ceases to be listed for trading on the NASDAQ Capital Market, we expect that our common stock would be traded on the “Pink Sheets” or the Over the Counter Bulletin Board (OTCBB). Any delisting of our common stock by NASDAQ could adversely affect our ability to attract new investors, decrease the liquidity of our outstanding shares of common stock, reduce our flexibility to raise additional capital, reduce the price at which our common stock trades and increase the transaction costs inherent in trading such shares with overall negative effects for our shareholders. In addition, delisting of our common stock could deter broker-dealers from making a market in or otherwise seeking or generating interest in our common stock, and might deter certain institutions and persons from investing in our securities at all. For these reasons and others, delisting could have a material adverse effect on our business, prospects, financial condition and results of operations.

Annual Meeting of Shareholders

On July 31, 2012, we held our 2012 Annual Meeting of Stockholders (the “Annual Meeting”). The total number of shares represented in person or by proxy at the Annual Meeting was 47,212,479, of the 54,657,074 shares of our common stock then outstanding and entitled to vote at the Annual Meeting. The following matters were voted upon at

the Annual Meeting:

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Proposal No. 1: The following individuals were elected as our directors to serve until the next annual meeting of stockholders or until their successors are elected and qualified. The votes cast were as follows:

Director Nominee	Number of Votes		
	For	Withheld	Broker Non-Votes
Gregory Barnhill	21,647,671	4,210,274	21,354,534
Dennis Brovarone	21,617,878	4,240,067	21,354,534
John J. Carbone, M.D.	21,629,608	4,228,337	21,354,534
Michael L. Krall	21,738,605	4,119,340	21,354,534
Paul V. Maier	21,644,340	4,213,605	21,354,534
Donna Singer	21,889,355	3,968,590	21,354,534

Proposal No. 2: Approval of an amendment to our Certificate of Incorporation to effect a reverse stock split within a range of no less than 1-for-4 or greater than 1-for-10. The votes cast were as follows:

For	Against	Abstain
37,755,234	8,607,425	849,816

Proposal No. 3: Approval of the appointment of Mayer Hoffman McCann P.C. as the Company's independent registered public accounting firm for the fiscal year ending July 31, 2012. The votes cast were as follows:

For	Against	Abstain
43,596,862	3,395,758	219,859

All of the share numbers reflected above under the caption entitled "Annual Meeting of Shareholders" do not give effect to the Reverse Stock Split.

Reverse Stock Split

On August 13, 2012, we filed a Certificate of Amendment to our Certificate of Incorporation ("Certificate of Amendment") with the Secretary of State of the State of Delaware to effect a 1-for-8 reverse stock split of our issued and outstanding common stock, \$0.01 par value per share (the "Reverse Stock Split"). The Certificate of Amendment was approved by our stockholders at our Annual Meeting of Stockholders held on July 31, 2012. The Reverse Stock Split was effective as of the close of trading on August 14, 2012, with each eight (8) shares of our issued and outstanding common stock automatically combined and converted into one (1) issued and outstanding share of common stock, par value \$0.01 per share. Our common stock started trading on a post-Reverse Stock Split basis as of the opening of trading on August 15, 2012. The Reverse Stock Split affected all issued and outstanding shares of common stock, as well as common stock underlying stock options, warrants, and convertible notes outstanding immediately prior to the effectiveness of the Reverse Stock Split. The Reverse Stock Split reduced the number of outstanding shares of the common stock outstanding prior to the Reverse Stock Split from approximately 57.8 million to approximately 7.2 million. The number of authorized shares of the common stock was not affected by the Reverse Stock Split.

No fractional shares were issued in connection with the Reverse Stock Split. Stockholders of the Company who would otherwise have held a fractional share of common stock instead will receive a cash payment in lieu of such fractional share based on the average per share closing price of the common stock on the NASDAQ Capital Market for the five trading days prior to the effective date of the Reverse Stock Split, which was \$0.37.

Unless otherwise noted, the information set forth in this prospectus supplement reflects the Reverse Stock Split. Information contained in the prospectus accompanying this prospectus supplement and information incorporated by reference in this prospectus supplement from documents filed with the SEC prior to August 14, 2012 does not reflect the Reverse Stock Split.

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Bridge Loan

On June 26, 2012 we entered into an agreement under which we could borrow a maximum of \$1,200,000 in exchange for our issuance of Secured Convertible Notes in the principal amount of \$1,334,333 in a transaction we refer to as the "Bridge Loan". On July 9, 2012, we closed the Bridge Loan and received cash consideration in the amount of \$1,200,000 from nine lenders. Under the terms of the Bridge Loan we issued nine (9) identical (except for the amount loaned) Secured Convertible Notes in favor of the lenders in the aggregate principal amount of \$1,334,333. The proceeds of the Bridge Loan were used to help fund our proxy fight we recently concluded, as well as for working capital and general corporate purposes.

The Secured Convertible Notes have an interest rate of -0-% so long as we repay the principal balance on or before December 26, 2012 and there is no other event of default; there is a one-time interest charge of 10% if we fail to repay the entire balance of the Secured Convertible Notes by December 26, 2012. The Secured Convertible Notes are secured by a lien on all of our assets pursuant to a Security Agreement. The Secured Convertible Notes are also convertible, at the option of the Lenders, into shares of our common stock if the entire balance is not repaid by December 26, 2012 or if an event of default has occurred; the price for the conversion is now \$3.29 per share as a result of the recent Reverse Stock Split (subject to further adjustment for stock splits dividends, distributions, recapitalizations and the like), which could result in the issuance of approximately 405,572 shares of our common stock.

As additional consideration for the Bridge Loan, we also provided or issued, as appropriate, to each of the Lenders at closing: (i) that number of shares of our common stock equal to 15% of the actual investment of each Lender, based on an original price of \$0.41 per share (resulting in the issuance of 54,878 shares of our common stock to the Lenders) ; (ii) a 10% original issue discount on the Secured Convertible Notes so that each Lender remitted to us 90% of the principal amount of their respective Secured Convertible Note (resulting in the Lenders investing a total of \$1,200,000 to us); (iii) warrants to acquire that number of shares of our common stock equal to 35% of the actual investment of each Lender, at an original purchase price of \$0.41 per share subject to certain adjustments, with a term of 4 years (resulting in the issuance of warrants to acquire 128,049 shares of our common stock, subject to certain adjustments); and, (iv) we issued 575,000 share of our common stock as additional collateral for the timely repayment of the Secured Convertible Notes. Both the Secured Convertible Notes and the Warrants provide for full-ratchet anti-dilution protection in the event that any shares of our common stock, or securities convertible into common stock, are issued at less than the conversion price of the Secured Convertible Note or exercise price of the Warrants then in effect, subject to customary exceptions. We are subject to certain liquidated damages if we fail to timely effectuate a conversion under the terms of the Secured Convertible Notes. All agreements and documents entered into or delivered as part of the Bridge Loan were done so pursuant to a Securities Purchase Agreement we entered into with each of the Lenders.

The Warrants may be exercised on a cashless basis if after the six month anniversary of the closing date of the Bridge Loan there is no effective registration statement registering the shares underlying the Warrants. If on or before September 24, 2012 we consummate a registered public offering of our securities resulting in gross proceeds to us of at least \$4,000,000 at a price per share that is lower than \$.41 (subject to adjustment for stock splits dividends, distributions, recapitalizations and the like), then the number of shares of common stock subject to the Warrant will be increased by using such lower price. The price used shall also be the exercise price of the Warrants.

Our obligations under the Secured Convertible Notes are guaranteed by a pledge of all assets of the Company pursuant to a Security Agreement. As noted above, we also issued 575,000 shares of our common stock as additional collateral on the Secured Convertible Notes pursuant to the Security Agreement and a Stock Escrow Agreement.

Each of the Lenders executed, or received as appropriate, the Securities Purchase Agreement, Secured Convertible Note, Security Agreement, Stock Escrow Agreement, Common Stock Purchase Warrants, and an Addendum to Transaction Documents (which we collectively refer to as the “Loan Agreements”). The Loan Agreements contain representations and warranties of the Company, as well as affirmative and negative covenants imposed by us and accepted as obligations of the Company. The Loan Agreements also contain customary events of default, including nonpayment of principal, interest, fees or other amounts when due; violation of covenants, subject in certain cases to stated grace periods; the attachment or seizure of a substantially all of our assets; the occurrence of certain bankruptcy events; the prevention by governmental authorities of the conduct of a material part of our business; the occurrence of certain payment defaults in respect of other indebtedness; the handing down of certain material judgments adverse to the Company; and inaccuracy of representations and warranties. If an event of default occurs and is continuing, we may be required to repay all amounts outstanding under the Loan Agreements. The Lenders may elect to accelerate the maturity of amounts due under the Loan Agreements upon the occurrence and during the continuation of an event of default.

Each of the Lenders have agreed to limit the number of shares of our common stock to be issued to them in the Bridge Loan transaction in order to satisfy certain requirements imposed by NASDAQ for the continued listing of our common stock. As such, the Lenders shall have no right to receive from us more than nine percent (9%) of the amount of our common stock issued and outstanding as of and on June 03 2012, unless our shareholders shall have approved the Bridge Loan. The new limitation shall be imposed on each of the Lenders pro rata based upon the original principal balance of the note issued to each respective Lender.

Corporate Information

We are currently a Delaware corporation. We originally incorporated in the state of California on August 24, 1992 under the name “Innovative Medical Services”. We changed our name to Pure Bioscience on October 6, 2003. On March 24, 2011 we changed our state of incorporation from California to Delaware and changed our name from Pure Bioscience to Pure Bioscience, Inc. We have one wholly owned subsidiary, ETIH2O Corporation, a Nevada corporation. ETIH2O Corporation currently has no business operations and no material assets or liabilities and there have been no significant transactions related to ETIH2O Corporation.

Our principal executive offices are located at 1725 Gillespie Way, El Cajon, California, 92020. Our telephone number is (619) 596-8600. Our website is located at www.purebio.com. The information found on, or accessible through, our website is not incorporated by reference and should not be considered a part of this prospectus.

The Offering

Securities being offered by us in this offering	_____ shares of common stock
Common stock to be outstanding before this offering	7,219,617 shares of common stock
Common stock to be outstanding after this offering (1)	_____ shares of common stock
Use of proceeds	Any net proceeds we may receive will be used for general corporate purposes, working capital and to repay the \$1,334,333 of indebtedness we incurred in the Bridge Loan, described on Page S-11. See “Use of Proceeds”.

NASDAQ Capital Markets symbol

PURE

Risk Factors

Investing in our common stock involves risks and purchasers of our common stock may lose their entire investment. See “Risk Factors” and the other information included and incorporated by reference in this prospectus supplement and the accompanying prospectus for a discussion of risk factors you should carefully consider before deciding to invest in our securities.

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(1) The number of shares of our common stock to be outstanding after this offering is based on 7,219,617 shares of our common stock outstanding as of September __, 2012. This number does not include:

- a. 330,315 shares of our common stock issuable pursuant to outstanding options;
- b. 427,312 shares of our common stock issuable pursuant to outstanding warrants
- c. 405,572 shares of our common stock issuable upon conversion of our Secured Convertible Notes with an original principal balance of \$1,334,333 ; or
- d. 247,338 shares of our common stock reserved for future grants and awards under our equity compensation plans for vested and unvested stock options.

Except as otherwise indicated, all information in this prospectus supplement reflects the Reverse Stock Split and assumes no exercise by the underwriters of their over-allotment option.

RISK FACTORS

An investment in our common stock involves a high degree of risk. You should consider carefully the risks described below, and in the section entitled “Risk Factors” contained on page 8 of the accompanying prospectus in its entirety, together with other information in this prospectus supplement, the accompanying prospectus, and the other information and documents incorporated by reference herein. If any of the events contemplated by these discussions of risks should occur, our business, prospects, results of operations, financial condition, and or cash flows could suffer significantly. As a result, the trading price of our common stock could decline, and you may lose all or part of the money you paid to buy our common stock.

We may not be able to maintain our NASDAQ listing and if we are delisted, our stock price may be harmed and it may make it more difficult for you to sell your shares.

As described under the caption “NASDAQ Delisting Notification” above, we have received a series of deficiency letters from NASDAQ and face the prospect of delisting if we are unable to satisfy the requirements of the Panel. While we intend to make diligent efforts to satisfy all requirements set forth by the Panel in order to maintain our NASDAQ listing, these efforts may not be successful and our common stock may nevertheless be delisted from the NASDAQ Capital Market. If our common stock ceases to be listed for trading on the NASDAQ Capital Market, we expect that our common stock would be traded on the “Pink Sheets” or the Over the Counter Bulletin Board (OTCBB). Any delisting of our common stock by NASDAQ could adversely affect our ability to attract new investors, decrease the liquidity of our outstanding shares of common stock, reduce our flexibility to raise additional capital, reduce the price at which our common stock trades and increase the transaction costs inherent in trading such shares with overall negative effects for our shareholders. In addition, delisting of our common stock could deter broker-dealers from making a market in or otherwise seeking or generating interest in our common stock, and might deter certain institutions and persons from investing in our securities at all. For these reasons and others, delisting could have a material adverse effect on our business, prospects, financial condition and results of operations.

The Reverse Stock Split ultimately may not increase our stock price and we may not be able to continue to list our common stock on the NASDAQ Capital Market.

We expect that the Reverse Stock Split of our common stock will increase the market price of our common stock so that we will be able to satisfy the Bid Price Rule. However, the effect of the Reverse Stock Split upon the market price of our common stock cannot be predicted with certainty, and the results of reverse stock splits by companies in similar circumstances are varied. It is possible that the share price of our common stock immediately after the Reverse Stock Split will not remain increased in proportion to the reduction in the number of shares of our common stock outstanding. If the market price of our common stock declines following the effectuation of the Reverse Stock Split, the percentage decline may be greater than would occur in the absence of a Reverse Stock Split. If in the future we again fail to comply with the Bid Price Rule, we may seek shareholder approval for an additional reverse split. A second reverse split could produce negative effects and we cannot provide any assurance that it would result in a long-term or permanent increase in the bid price of our common stock. For example, a second reverse split could make it more difficult for us to comply with other listing standards of NASDAQ, including requirements related to the minimum number of shares that must be in the public float, the minimum market value of publicly held shares and the minimum number of round lot holders. In addition, investors might consider the increased proportion of unissued authorized shares of common stock to issued shares of common stock to have an anti-takeover effect under certain circumstances by allowing for dilutive issuances which could prevent certain shareholders from changing the composition of our board of directors.

The Reverse Stock Split may decrease the liquidity of our stock.

The liquidity of our common stock may be affected adversely by the Reverse Stock Split given the reduced number of shares that will be outstanding after the Reverse Stock Split, especially if our stock price does not increase as a result of the Reverse Stock Split. In addition, the Reverse Stock Split may increase the number of stockholders who own odd lots (less than 100 shares) of our common stock, creating the potential for such stockholders to experience an increase in the cost of selling their shares and greater difficulty effecting sales.

After the Reverse Stock Split, the resulting stock price may not attract new investors, including institutional investors, and may not satisfy the investing requirements of those investors. Consequently, the trading liquidity of our common stock may not improve.

Although we believe that a higher stock price may help generate greater or broader investor interest, there can be no assurance that the Reverse Stock Split will result in a share price that will attract new investors, including institutional investors. In addition, there can be no assurance that the share price will satisfy the investing requirements of those investors. As a result, the trading liquidity of our common stock may not necessarily improve.

Our management will have broad discretion over the use of the net proceeds from this offering and may not apply those proceeds in ways that increase the value of your investment.

Our management has broad discretion over the application of the net proceeds from this offering. We intend to use the net proceeds for general corporate purposes, working capital, and to pay off the Bridge Loan transaction we recently closed, which resulted in \$1,334,333 of indebtedness. We may fail to use these funds effectively to yield a significant return, or any return, on any investment of these proceeds and we cannot assure you the proceeds will be used in a manner which you would approve.

You will experience immediate dilution in the book value per share of the common stock you purchase.

Because the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock

you purchase in this offering. Based on an assumed public offering price of \$ _____ per share, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$ _____ per share in the net tangible book value of the common stock. See “Dilution” on page S-11 for a more detailed discussion of the dilution you will incur in this offering.

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Future sales of shares by existing stockholders could cause our stock price to decline.

As of September ____, 2012, we had 7,219,617 shares of our common stock outstanding. Sales of a substantial number of shares of our common stock in the public market by existing stockholders, whether upon the expiration of the below described lock-up agreements or otherwise, could cause the market price of our common stock to decline. If there are more shares of common stock offered for sale than buyers are willing to purchase, then the market price of our common stock may decline to a market price at which buyers are willing to purchase shares.

USE OF PROCEEDS

We estimate that our net proceeds from the sale of the shares offered pursuant to this prospectus supplement, will be approximately \$ ____ million, or approximately \$ ____ million if the underwriter exercises in full its option to purchase ____ additional shares, based upon the public offering price of \$ ____ per share and after deducting the underwriting discount and the estimated offering expenses that are payable by us.

We intend to use the net proceeds from this offering for general corporate purposes and working capital, including without limitation to repay the \$1,334,333 of indebtedness we incurred in the Bridge Loan transaction. The interest rate for the notes we issued in the Bridge Loan is zero (-0-) so long as we repay the notes on or before December 26, 2012, which is also the maturity date for the notes. The proceeds from the Bridge Loan transaction were used to help fund our proxy fight we recently concluded, as well as for working capital.

We may also use a portion of the net proceeds to acquire or invest in complementary businesses, products, and technologies. Although we have no specific agreements, commitments, or understandings with respect to any acquisition, we evaluate acquisition opportunities and engage in related discussions with other companies from time to time.

As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses of the proceeds from this offering. Accordingly, we will retain broad discretion over the use of such proceeds.

Pending use of the proceeds as described above or otherwise, we intend to invest the net proceeds in money market funds and/or short-term interest-bearing, investment-grade securities.

DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We currently intend to retain our future earnings, if any, for use in our business and therefore do not anticipate paying cash dividends in the foreseeable future. Payment of future dividends, if any, will be at the discretion of our board of directors after taking into account various factors, including our financial condition, operating results, current and anticipated cash needs and plans for expansion.

DILUTION

Our net tangible book value as of August 30, 2012 was negative \$181,000, or approximately negative \$0.03 per share of common stock, adjusted for the reverse stock split. Net tangible book value per share is determined by dividing tangible stockholders' equity, which is total tangible assets less total liabilities, by the aggregate number of shares of common stock outstanding. Tangible assets represent total assets excluding goodwill and other intangible assets. Dilution in net tangible book value per share represents the difference between the amount per share of common stock issued in this offering and the net tangible book value per share of our common stock immediately afterwards. Assuming the sale by us of shares at a public offering price of \$__ per share, after deducting our estimated offering expenses, our as adjusted net tangible book value as of August 30, 2012 would have been \$_____, or \$0.___ per share of common stock. This represents an immediate increase in net tangible book value of \$0.___ per share to our existing shareholders and an immediate decrease in net tangible book value of \$__ per share to the new

investors purchasing shares in this offering.

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The following table illustrates this per share dilution:

Public offering price(1)	
Net tangible book value before this offering	\$0.____
Increase attributable to new investors	\$
Pro forma net tangible book value after this offering(1)	\$
Dilution per share to new investors	\$

(1) After deduction of the underwriting discount and our estimated offering expenses.

The foregoing illustration does not reflect potential dilution from the exercise of outstanding options or warrants to purchase shares of our common stock or the conversion of the Bridge Loan.

DESCRIPTION OF THE SECURITIES WE ARE OFFERING

As of the date of this prospectus supplement, we are authorized to issue 100,000,000 shares of common stock with a par value of \$0.001. As of September __, 2012, there were 7,219,617 shares of common stock issued and outstanding.

The material terms and provisions of our common stock are described under the caption “Description of Capital Stock” starting on page 23 of the accompanying prospectus.

UNDERWRITING

Aegis Capital Corp. is acting as sole underwriter in this offering. We have entered into an underwriting agreement, dated _____, 2012 (the “Underwriting Agreement”), with the underwriter. Subject to the terms and conditions of the Underwriting Agreement, we have agreed to sell to the underwriter and the underwriter has agreed to purchase, at the public offering price less the underwriting discount set forth on the cover page of this prospectus supplement, the number of shares of common stock listed in the following table:

Name of Underwriter	Number of Shares
Aegis Capital Corp.	
Total	

The underwriter is committed to purchase all of the shares of common stock offered by us other than those covered by the option to purchase additional shares described below, if they purchase any shares. The obligations of the underwriter may be terminated upon the occurrence of certain events specified in the Underwriting Agreement. Furthermore, pursuant to the Underwriting Agreement, the underwriter’s obligations are subject to customary conditions, representations and warranties contained in the Underwriting Agreement, such as receipt by the underwriter of officers’ certificates and legal opinions.

We have agreed to indemnify the underwriter against specified liabilities, including liabilities under the Securities Act of 1933, and to contribute to payments the underwriter may be required to make in respect thereof.

The underwriter is offering the shares, subject to prior sale, when, as and if issued to and accepted by it, subject to approval of legal matters by their counsel and other conditions specified in the Underwriting Agreement. The underwriter reserves the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

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We have granted the underwriter an over-allotment option. This option, which is exercisable for up to 45 days after the date of this prospectus, permits the underwriters to purchase a maximum of _____ additional shares from the selling stockholders and _____ additional shares (15% of the shares sold in this offering) from us to cover over-allotments. If the underwriter exercises all or part of this option, it will purchase shares covered by the option, if any, at the public offering price that appears on the cover page of this prospectus supplement, less the underwriting discount.

Discounts and Commissions. The following table shows the public offering price, underwriting discount and proceeds, before expenses, to us. The information assumes either no exercise or full exercise by the underwriter of their over-allotment option.

	Per Share	Total Without Over-Allotment Option	Total With Over-Allotment Option
Public offering price	\$	\$	\$
Underwriting discount (7%)	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$

The underwriter proposes to offer the shares offered by us to the public at the public offering price set forth on the cover of this prospectus supplement. In addition, the underwriter may offer some of the shares to other securities dealers at such price less a concession of \$ _____ per share. If all of the shares offered by us are not sold at the public offering price, the underwriter may change the offering price and other selling terms by means of a further supplement to this prospectus supplement.

We have agreed to pay a non-accountable expense allowance to the underwriter equal to 1% of the gross proceeds received in the offering; provided however a non-accountable expense allowance shall be paid in connection with the over-allotment option only if such over-allotment option is exercised. We have paid an expense deposit of \$25,000 to each of the representatives, which will be applied against the non-accountable expense allowance.

As additional compensation to the underwriter, upon consummation of this offering, we will issue warrants to purchase an aggregate number of shares of our common stock equal to 3% percent of all shares of common stock sold in the offering, excluding shares sold upon exercise of the over-allotment option, at an exercise price per share equal to \$ _____ (125% of the public offering price of the shares sold in this offering) (the “Underwriter Warrants”). The Underwriter Warrants will become exercisable on the one year anniversary of the commencement of sales (the “Commencement Date”) and have a term of five years from the Commencement Date. The Underwriter Warrants and underlying shares of common stock will not be exercised, sold, transferred, assigned, or hypothecated or be the subject of any hedging, short sale, derivative, put or call transaction that would result in the effective economic disposition of the Underwriter Warrants by any person for a period of one year after the Commencement Date in accordance with Financial Industry Regulatory Authority (“FINRA”) Rule 5110. The Underwriter Warrants grant a holder a one-time demand and unlimited “piggy back” registration rights for specified periods.

We have also agreed to pay the underwriter’s expenses relating to the offering, including (a) all fees incurred in clearing this offering with FINRA; (b) all fees, expenses and disbursements relating to the registration, qualification or exemption of securities offered under the securities laws of foreign jurisdictions designated by the underwriters; (c) all fees, expenses, and disbursements relating to background checks of our officers and directors in an amount not to exceed an aggregate of \$15,000; (d) up to \$20,000 of the actual road show expenses of the underwriters in connection with the offering; and (e) \$20,000 for the underwriter’s use of Ipreo’s book-building, prospectus tracking and compliance software for this offering.

We estimate that the total expenses of the offering payable by us, excluding the total underwriting discount, will be approximately \$ _____.

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Discretionary Accounts. The underwriter does not intend to confirm sales of the shares of common stock offered hereby to any accounts over which they have discretionary authority.

Right of First Refusal. We have granted to the underwriter a right of first refusal for a period of twelve months from the closing of this offering to purchase for its account or to sell for our account, or any subsidiary or successor, any securities of the Company or any such subsidiary or successor which we or any subsidiary or successor may seek to sell in public or private equity and public debt offerings whether with or without or through an underwriter, placement agent or broker-dealer. We may, however, in lieu of granting a right of first refusal, designate the underwriter as lead underwriter or co-manager of any underwriting group or co-placement agent of any proposed financing, and the underwriter shall be entitled to receive as its compensation 50% of the compensation payable to the underwriting or placement agent group when serving as co-manager or co-placement agent and 33% of the compensation payable to the underwriting or placement agent group when serving as co-manager or co-placement agent with respect to a proposed financing in which there are three co-managing or lead underwriters or co-placement agents.

Lock-Up Agreements. Pursuant to certain “lock-up” agreements, we, our executive officers and directors, and certain of our stockholders have agreed, subject to certain exceptions, not to offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of or announce the intention to otherwise dispose of, or enter into any swap, hedge or similar agreement or arrangement that transfers, in whole or in part, the economic risk of ownership of, directly or indirectly, engage in any short selling of any common stock or securities convertible into or exchangeable or exercisable for any common stock, whether currently owned or subsequently acquired, without the prior written consent of the underwriter, for a period of ninety (90) days after the date of this prospectus supplement, subject to certain exceptions, and subject to an 18-day extension. This lock-up provision applies to common stock and to securities convertible into or exchangeable or exercisable for common stock. It also applies to common stock owned now or acquired later by the person executing the agreement or for which the person executing the agreement later acquires the power of disposition.

Electronic Offer, Sale and Distribution of Shares. A prospectus supplement in electronic format may be made available on the websites maintained by the underwriter and the underwriter may distribute prospectus supplements electronically. The underwriter may agree to allocate a number of shares to the underwriter for sale to its online brokerage account holders. Other than the prospectus supplement in electronic format, the information on these websites are not part of this prospectus supplement or the registration statement of which this prospectus supplement forms a part, has not been approved or endorsed by us or the underwriter in its capacity as underwriter, and should not be relied upon by investors.

Other Relationships. The underwriter and its affiliates have provided, and may in the future provide, various investment banking, commercial banking and other financial services for us and our affiliates for which they have received, and may in the future receive, customary fees, however, except as disclosed in this prospectus supplement, we have no present arrangements with the underwriter for any further services.

Stabilization. In order to facilitate this offering of shares, the underwriter may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock. Specifically, the underwriter may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. The underwriter can close out a covered short sale by exercising the over-allotment option or by purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriter will consider, among other things, the open market price of shares compared to the price available under the over-allotment option. The underwriter may also sell shares in excess of the over-allotment option, creating a naked short position. The underwriter must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriter is concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors that purchase in this offering. In addition, to stabilize the price of the common stock, the underwriter may bid for and purchase shares of common stock in the open market.

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In connection with this offering, the underwriter may engage in passive market making transactions in our common stock on the Nasdaq Capital Market in accordance with Rule 103 of Regulation M under the Exchange Act during a period before the commencement of offers or sales of common stock and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid that bid must then be lowered when specified purchase limits are exceeded.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriter for its own accounts, may have the effect of preventing or retarding a decline in the market price of our common stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued at any time. These transactions may be effected on the over-the-counter market or otherwise.

Offer Restrictions Outside the United States

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus supplement in any jurisdiction where action for that purpose is required. The securities offered by this prospectus supplement may not be offered or sold, directly or indirectly, nor may this prospectus supplement or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus supplement comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus supplement. This prospectus supplement does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus supplement in any jurisdiction in which such an offer or a solicitation is unlawful.

The shares have not been and will not be qualified for issuance under applicable securities laws in Canada, including provincial securities laws, and accordingly, the shares may not be offered or sold within Canada except in transactions exempt from the prospectus requirements of applicable securities laws in Canada, including provincial securities laws. Accordingly, the shares are being offered and sold in Canada only to certain categories of "Accredited Investors" as the term is defined in National Instrument 45-106 - Prospectus and Registration Exemptions, being "Canadian permitted clients" as that term is defined in National Instrument 31-103 - Registration Requirements, Exemptions and Ongoing Registrant Obligations. Because of these restrictions, purchasers are advised to consult legal counsel prior to making any offer, resale, pledge or other transfer of the shares offered hereby.

The foregoing does not purport to be a complete statement of the terms and conditions of the underwriting agreement. Reference is made to a copy of the underwriting agreement, which is included as an exhibit to our Current Report on Form 8-K filed with the Securities and Exchange Commission in connection with this offering.

Common Stock Listing and Transfer Agent

Our common stock is traded on the Nasdaq Capital Market under the trading symbol PURE. The transfer agent for our common stock is Computershare Trust Company, N.A. Its address is 350 Indiana Street, Suite 800, Golden, Colorado 90401, and its telephone number is (303) 262-0600.

LEGAL MATTERS

The validity of the securities offered by this prospectus has been passed upon for us by Spectrum Law Group, LLP, Irvine, California, our counsel. Certain legal matters related to the offering will be passed upon for the underwriter by

Sichenzia Ross Friedman Ference LLP, New York, New York.

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EXPERTS

Mayer Hoffman McCann P.C., independent registered public accounting firm (“Mayer”), has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended July 31, 2011. Our financial statements are incorporated by reference in reliance on Mayer’s report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement and the accompanying prospectus are part of the registration statement on Form S-3 we filed with the Securities and Exchange Commission, or SEC, under the Securities Act, and do not contain all the information set forth in the registration statement. You may inspect a copy of the registration statement, including the exhibits and schedules, without charge, at the SEC’s public reference room mentioned below, or obtain a copy from the SEC upon payment of the fees prescribed by the SEC.

Because we are subject to the information and reporting requirements of the Exchange Act, we file annual, quarterly and special reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC’s website at www.sec.gov. You may also read and copy any document we file at the SEC’s Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

INCORPORATION OF DOCUMENTS BY REFERENCE

The Securities Act allows us to “incorporate by reference” into this prospectus the documents we file with the Securities and Exchange Commission, which means that we can disclose important information to you by referring you to these documents. The information that we incorporate by reference into this prospectus is considered to be part of this prospectus, and information that we file later with the Securities and Exchange Commission automatically updates and supersedes any information in this prospectus. We have filed the following documents with the Securities and Exchange Commission. These documents are incorporated by reference as of their respective dates of filing:

- Our annual report on Form 10-K for the year ended July 31, 2011, filed with the SEC on October 31, 2011;
- Our quarterly report on Form 10-Q for the quarterly period ended April 30, 2012, filed with the SEC on June 13, 2012;
- Our quarterly report on Form 10-Q for the quarterly period ended January 31, 2012, filed with the SEC on March 16, 2012;
- Our quarterly report on Form 10-Q and Form 10-Q/A for the quarterly period ended October 31, 2011, filed with the SEC on December 15, 2011 and December 22, 2011, respectively;
 - Our definitive proxy statement on Schedule 14A filed with the SEC on July 12, 2012; and
 - Our current reports on Form 8-K filed with the SEC on December 15, 2011, March 16, 2012, March 28, 2012, April 24, 2012, May 10, 2012, May 21, 2012, June 7, 2012, June 13, 2012, June 26, 2012, June 29, 2012, July 6, 2012, July 12, 2012, July 13, 2012, August 1, 2012, August 8, 2012 and August 16, 2012.

In addition, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 and 15(d) of the Exchange Act, after the date of this prospectus or after the date of the registration statement of which this prospectus forms a part (the “Registration Statement”) and prior to (i) effectiveness of the Registration Statement; and (ii) the filing of a post-effective amendment that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference into this prospectus and to be a part hereof from the date of filing of such documents. Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any other subsequently filed document that is incorporated by reference herein modifies or supersedes such earlier

statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

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Nothing in this prospectus supplement shall be deemed to incorporate information furnished but not filed with the Securities and Exchange Commission pursuant to Item 2.02 or Item 7.01 of Form 8-K.

We will provide, without charge, upon written or oral request of any person to whom a copy of this prospectus is delivered, a copy of any or all of the foregoing documents and information that has been or may be incorporated in this prospectus by reference, other than exhibits to such documents unless such exhibits are specifically incorporated by reference in any such documents and information. Requests for such documents and information should be directed to:

Pure Bioscience, Inc.
Attn: Donna Singer
1725 Gillespie Way
San Diego, CA 92020
(619)596-8600

PURE BIOSCIENCE, INC.
\$50,000,000
Preferred Stock
Common Stock
Warrants
Units

From time to time, we may offer and sell shares of preferred stock, common stock, warrants, or units to purchase preferred stock, common stock, warrants or any combination of these securities, either separately or in units, in one or more offerings in amounts, at prices and on terms that we will determine at the time of the offering. The aggregate initial offering price of all securities sold by us under this prospectus will not exceed \$50,000,000.

We will specify in the accompanying prospectus supplement the terms of the securities to be offered and sold. We may sell these securities to or through underwriters or dealers and also to other purchasers or through agents. We will set forth the names of any underwriters, dealers or agents in the accompanying prospectus supplement.

Our common stock is listed on the NASDAQ Capital Market under the symbol "PURE." On July 23, 2012, the last reported sale price of the shares of our common stock on the NASDAQ Capital Market was \$0.35 per share.

Investing in our securities involves a high degree of risk. See "Risk Factors" on page 8 of this prospectus and any other risk factors included in any accompanying prospectus supplement and in the documents incorporated by reference in this prospectus for a discussion of the factors you should carefully consider before deciding to purchase these securities.

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

This prospectus may not be used to consummate sales of securities unless, to the extent required by applicable law, it is accompanied by a prospectus supplement.

The date of this prospectus is , 2012.

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You should rely only on the information contained or incorporated by reference in this prospectus, any accompanying prospectus supplement or any “free writing prospectus” we may authorize to be delivered to you. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should assume that the information appearing in this prospectus, any prospectus supplement and the documents incorporated by reference herein and therein are accurate only as of their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates. Neither this prospectus nor any accompanying prospectus supplement shall constitute an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Using this process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offering transactions up to a total dollar amount of \$50,000,000. We have provided to you in this prospectus a general description of the securities we and the selling stockholders may offer. Each time we or the selling stockholders sell securities, we will, to the extent required by law, provide a prospectus supplement that will contain specific information about the terms of the offering. We may also add, update or change in any accompanying prospectus supplement or any “free writing prospectus” we may authorize to be delivered to you any of the information contained in this prospectus. To the extent there is a conflict between the information contained in this prospectus and the prospectus supplement, you should rely on the information in the prospectus supplement, provided that if any statement in one of these documents is inconsistent with a statement in another document having a later date — for example, a document incorporated by reference in this prospectus or any prospectus supplement — the statement in the document having the later date modifies or supersedes the earlier statement. This prospectus, together with any accompanying prospectus supplement and any “free writing prospectus” we may authorize to be delivered to you, includes all material information relating to the offering of our securities.

As permitted by the rules and regulations of the SEC, the registration statement, of which this prospectus forms a part, includes additional information not contained in this prospectus. You may read the registration statement and the other reports we file with the SEC at the SEC’s website or at the SEC’s offices described below under the heading “Where You Can Find Additional Information”.

THIS PROSPECTUS MAY NOT BE USED TO SELL ANY SECURITIES UNLESS ACCOMPANIED BY A PROSPECTUS SUPPLEMENT.

SUMMARY

Pure Bioscience, Inc.

Pure Bioscience, Inc. is a Delaware corporation, originally incorporated in the state of California on August 24, 1992 under the name “Innovative Medical Services”. We changed our name to Pure Bioscience on October 6, 2003. On March 24, 2011 we changed our state of incorporation from California to Delaware and changed our name from Pure Bioscience to Pure Bioscience, Inc. We have one wholly owned subsidiary, ETIH2O Corporation, a Nevada corporation. ETIH2O Corporation currently has no business operations and no material assets or liabilities and there have been no significant transactions related to ETIH2O Corporation.

We are focused on the discovery, development and commercialization of bioscience products that provide solutions to global health challenges. Our technology platform is based on stabilized ionic silver, and our initial products contain silver dihydrogen citrate, or SDC. SDC is a broad-spectrum, non-toxic antimicrobial. We manufacture and sell SDC-based disinfecting and sanitizing products, which are registered by the Environmental Protection Agency, or EPA, to distributors and end users. We also manufacture and sell various SDC-based formulations to manufacturers for use as a raw material in the production of personal care and other products. We believe our technology platform has potential application in a number of industries, and we have ongoing research and development projects in food processing, agriculture, water treatment, pharmaceuticals, and oil and gas.

Our goal is to become a sustainable company by using our proprietary technology platform to deliver leading antimicrobial products to multiple industries. We manufacture and sell SDC-based products for end use, and as a raw material for manufacturing use. Our current products are as follows:

Product Name	Product Use	EPA Registration
PURE® Hard Surface	Disinfectant and sanitizer	SDC3A
Axen® 30	Disinfectant	Axen30
Silvérion®	Raw material	Not applicable
Axenohl®	Raw material	Axenohl

PURE® Hard Surface

PURE® Hard Surface is our patented and EPA-registered hard surface disinfectant and food contact surface sanitizer. We manufacture both consumer and commercial versions of the product. PURE Hard Surface combines high efficacy and low toxicity with 30-second bacterial and viral kill times and 24-hour residual protection. The product completely kills resistant pathogens such as MRSA and Carbapenem-resistant *Klebsiella pneumoniae* (NDM-1), and effectively eliminates dangerous fungi and viruses including HIV, Hepatitis B, Hepatitis C, Norovirus, Influenza A, Avian Influenza and H1N1. It also eradicates hazardous food pathogens such as *E. coli*, *Salmonella*, *Campylobacter* and *Listeria*. PURE Hard Surface delivers broad-spectrum efficacy yet remains classified as least-toxic by the EPA. The active ingredient, SDC, has been designated as Generally Recognized as Safe, or GRAS, for use on food processing equipment, machinery and utensils.

Axen® 30

Axen®30 is our patented and EPA-registered hard surface disinfectant and is a predecessor product to PURE Hard Surface. Axen®30 is sold by distributors under the private label brands SpectraSan24, PureGreen24, Critical Care, Mother Nature’s Choice, Ag+ainst24 and IV-7. In prior years, we sold this product to other distributors that resold Axen30 under a variety of other private label brands.

Silvérion®

Silvérion® is our patented antimicrobial formulation for use as a raw material in the manufacturing of personal care products. It can be used as either an active ingredient or a preservative. Silvérion is a colorless, odorless and stable solution that provides ionic silver in a water-soluble form. It provides fast acting efficacy at low concentrations against a broad-spectrum of bacteria, viruses, yeast and molds.

Axenohl®

Axenohl® is our patented and EPA-registered antimicrobial formulation for use as a raw material in the manufacturing of EPA-registered products. Axenohl is a colorless, odorless and stable solution that provides fast acting efficacy against bacteria, viruses and fungi when manufactured into consumer and commercial disinfecting and sanitizing products.

We own the registered trademarks or pending trademark applications for PURE Bioscience®, Powered by SDC Ag+®, Staph Attack®, Staphacide®, Axenohl®, Axen®, Silvérion®, Kinderguard®, Cruise Control®, Nutripure™, Elderguard®, and Critterguard®, among others. In addition, we have applications for other trademarks, tradenames and service marks pending in countries outside of the United States. All other trademarks, tradenames and service marks included in this prospectus, or any related prospectus supplement or free writing prospectus, are the property of their respective owners.

Corporate Information

Our principal executive offices are located at 1725 Gillespie Way, El Cajon, California, 92020. Our telephone number is (619) 596-8600. Our website is located at www.purebio.com. The information found on, or accessible through, our website is not a part of this prospectus.

In this prospectus, unless otherwise stated or the context otherwise requires, references to “PURE,” “the Company,” “we,” “us” and “our” and similar references refer to Pure Bioscience, Inc. Each of the other trademarks, trade names or service marks appearing or incorporated by reference in this prospectus or any applicable prospectus supplement are the property of their respective owners.

Recent Developments

Richmont Sciences Litigation

We filed suit against Richmont Sciences, LLC on June 29, 2011 in San Diego County Superior Court, Case No. 37-2011-00068549-CU-CO-EC asserting various causes of action to collect on outstanding invoices. Richmont Sciences, LLC and Richmont Holdings, LLC filed a cross-complaint for damages against us asserting contract, tort and statutory (trade secret) claims arising out of business dealings with us. We then filed a cross-complaint for compensatory and punitive damages against both Richmont entities asserting contract and fraud claims. Our initial suit against Richmont Sciences, LLC and all related cross-claims are referred to herein as the “Richmont Litigation”.

Also as previously disclosed, a solicitation of proxies in favor of an opposing slate of six nominees for election as directors at the Company's upcoming 2012 annual meeting of stockholders was initiated by The Coalition to Save Pure ("the Coalition"), which consisted of Jeffrey P. Bash, Theodore J. Coburn, C. James Jensen, Dr. Martin Kassir, Thomas J. Reynolds, John P. Rochon and Richmond Corporation. Since the Company's initial receipt of notice from Richmond Corporation on behalf of the Coalition of its intent to pursue such proxy solicitation, the Company and the Coalition have filed separate preliminary proxy statements with the Securities and Exchange Commission (the "SEC") in connection with the solicitation of proxies at that annual meeting, and the Company filed its definitive proxy statement with the SEC on July 12, 2012. The Coalition has not filed a definitive proxy statement with the SEC or distributed any proxy statement to the Company's stockholders.

Effective as of July 9, 2012, we entered into a settlement agreement (the "Settlement Agreement") with Richmond Sciences, LLC, Richmond Holdings, Inc., Richmond Corporation, IV-7 Direct, LLC (collectively, "Richmont"), and the Coalition to Save Pure (the "Coalition"), which initiated the proxy fight which is discussed in greater detail in the next section titled "Richmont Corporation Proxy Fight". Pursuant to the terms of the Settlement Agreement, (1) all parties shall dismiss all claims and cross-claims in the Richmont Litigation with prejudice within five days after the date of the Settlement Agreement; (2) Richmont and its respective affiliates, including John P. Rochon, shall take and shall cause the Coalition to take all reasonable and necessary efforts to withdraw and not resubmit the Coalition's proxy solicitation in connection with our upcoming 2012 annual meeting of stockholders; and, (3) we shall make good faith efforts to, within 12 months after the date of our 2012 annual meeting of stockholders, replace one member of our Board of Directors with an independent director and add an additional independent director to our Board of Directors. In accordance with the terms of the Settlement Agreement, on July 11, 2012 we received written confirmation that the Coalition has discontinued its proxy solicitation in opposition to our slate of directors nominated for election at our 2012 annual meeting of stockholders. All parties to the Richmont Litigation have filed the necessary paperwork with the court to formalize the dismissal of all lawsuits in the Richmont Litigation.

Richmont Corporation Proxy Fight

We have received a notice from Richmond Corporation, or Richmont, announcing its intended nomination of six individuals for election to our Board of Directors, or Board, at our 2012 annual meeting. In the notice, Richmont confirmed its ownership of shares of our common stock, which represents less than one half of one percent of our outstanding common stock. Since our receipt of such notice: on December 23, 2011, Richmont filed a preliminary proxy statement with the Securities and Exchange Commission, or the SEC, describing its intended nomination of such individuals and, among other things, confirming its intent to terminate our ongoing litigation with Richmond Sciences, LLC and enter into a new, unspecified relationship with such entity in the event Richmont's proxy contest is successful; on February 17, 2012, we announced the date of our 2012 annual meeting of stockholders as July 25, 2012; and on February 27, 2012, Richmont filed a revised preliminary proxy statement in response to such announcement. We filed our preliminary contested proxy statement with the SEC on June 25, 2012. Richmont filed its preliminary revised contested proxy statement on June 27, 2012 and on July 6, 2012. We filed our definitive proxy statement, on Schedule 14A, on July 12, 2012. We intend to hold our annual meeting of shareholders on July 31, 2012.

As part of the settlement of the Richmont Litigation, as discussed above, Richmont and its respective affiliates, including John P. Rochon, shall take and shall cause the Coalition to take all reasonable and necessary efforts to withdraw and not resubmit the Coalition's proxy solicitation in connection with our upcoming 2012 annual meeting of stockholders. We also agreed, as part of that settlement, to make good faith efforts to, within 12 months after the date of our 2012 annual meeting of stockholders, to replace one member of our Board of Directors with an independent director and add an additional independent director to our Board of Directors. In accordance with the terms of the Settlement Agreement, on July 11, 2012 we received written confirmation that the Coalition has discontinued its proxy solicitation in opposition to our slate of directors nominated for election at our 2012 annual meeting of stockholders.

NASDAQ Delisting Notification

On September 16, 2011, we received a deficiency letter, or the Notification Letter, from The NASDAQ Stock Market, or NASDAQ, notifying the Company that its common stock no longer met NASDAQ's requirements for continued listing on the NASDAQ Capital Market under NASDAQ Listing Rule 5550(a)(2), or the Bid Price Rule, because the minimum bid price of the Company's common stock did not equal or exceed \$1.00 at least once over a period of 30 consecutive trading days prior to the date of the Notification Letter. Under NASDAQ Listing Rule 5810(c)(3)(A), the Company was afforded 180 calendar days, or until March 14, 2012, to regain compliance with the Bid Price Rule. The Company did not regain compliance with the Bid Price Rule by such date because the closing bid price of its common stock did not meet or exceed \$1.00 per share for at least 10 consecutive business days during the applicable 180-day period. Accordingly, on March 15, 2012, the Company received from NASDAQ a second deficiency letter, or the Second Notification Letter, notifying the Company that its common stock continued to be at risk of delisting from the NASDAQ Capital Market. As described in the Second Notification Letter, the Company was not eligible for an additional grace period to regain compliance with the Bid Price Rule because, based on market information at that time and the Company's stockholders' equity as reported in its Quarterly Report on Form 10-Q for the period ended October 31, 2011, the Company did not satisfy all applicable requirements for listing on the NASDAQ Capital Market under NASDAQ Listing Rule 5505. On March 23, 2012, the Company received from NASDAQ an additional deficiency letter, or the Third Deficiency Letter, notifying the Company that, based on the Company's stockholders' equity as reported in its Quarterly Report on Form 10-Q for the period ended January 31, 2012, the Company did not satisfy the minimum stockholders' equity for continued listing on the NASDAQ Capital Market under NASDAQ Listing Rule 5550(b)(1), and that such failure served as an additional basis for delisting the Company's common stock.

In accordance with NASDAQ's applicable procedures, the Company appealed NASDAQ's delisting determination by submitting to NASDAQ a written plan of compliance, which included the Company's commitment to implement a reverse stock split of its common stock, and appearing before a NASDAQ Hearings Panel, or the Panel, at an oral hearing on May 17, 2012.

On June 21, 2012, the Company received from NASDAQ its decision letter, or the Decision Letter, regarding the Company's appeal of the delisting determination, which notified the Company that the Panel has granted the Company's request to remain listed on the NASDAQ Capital Market subject to its satisfaction of certain conditions specified in the Decision Letter. Among those conditions are that (i) the Company file a preliminary proxy statement no later than June 26, 2012 in order attempt to obtain the approval of its stockholders of a reverse stock split, (ii) the Company is able to consummate certain capital-raising transactions in accordance with specified deadlines provided in the Decision Letter, (iii) on or before August 20, 2012, the Company provide evidence to the Panel that the closing bid price of its common stock has been \$1.00 or more for a minimum of ten consecutive trading days, and (iv) the Company keep NASDAQ updated regarding its progress toward satisfying the conditions set forth in (i), (ii) and (iii) above.

The Company filed its preliminary proxy statement with the Securities and Exchange Commission on June 25, 2012, in compliance with the timing requirement therefor set forth in the Decision Letter. Additionally, the Company raised additional capital in the Private Placement Stock Issuance, described below, as set forth in the Decision Letter. The Company is currently pursuing certain additional capital-raising activities in order to attempt to satisfy the requirements set forth in the Decision Letter relating to such transactions. If the Company fails to timely satisfy the conditions established by NASDAQ, the Panel will conclude that our Written Plan of Compliance is uncertain or will take longer than represented to execute, and will immediately delist the Company's common stock. The Company expects that it will continue its efforts to satisfy all requirements set forth by the Panel in order to maintain its NASDAQ listing, but those efforts may not be successful and the Company's common stock may be delisted from the NASDAQ Capital Market if is not able to meet the conditions that the Panel has, or may in the future, require.

Business Development

New Product Launches: We recently launched our PURE Multi-Purpose Cleaner Concentrate and PURE Floor Cleaner Concentrate as companion products to PURE Hard Surface disinfectant and food contact surface sanitizer. The three products comprise the PURE Complete System, which offers a comprehensive, cost-effective and user-friendly product line to end-users, janitorial service providers and the distributors that supply them.

New Distributors: We recently added the following new distributors:

1. **AHI Facility Services, Inc.:** We secured AHI as a regional strategic customer in the contract facilities market. AHI clients using PURE products include the corporate headquarters of Fossil, Inc.; Dr. Pepper Snapple Group, Inc.; McAfee, an Intel Company; and Dell Inc., as well as Metrocrest Hospital Authority, First United Methodist Church of Plano, and Northwood Church in Keller, Texas.

2. Intercon Chemical: We partnered with St. Louis-based Intercon Chemical Company for distribution of the PURE Complete System. Intercon has an established network of more than 200 distributors which service approximately 250,000 end-use customers. As a result of this relationship, Intercon Chemical promoted the PURE Complete System at the May 2012 National Restaurant Association Show, and also featured the PURE Complete System in June at APIC 2012, the annual conference of the Association for Professionals in Infection Control and Epidemiology.

Private Placement Stock Issuance

On June 29, 2012, we entered into a common stock purchase agreement (the "Purchase Agreement") with the fifteen investors. Under the Purchase Agreement we issued and sold to such investors an aggregate of 2,601,000 shares of our common stock and warrants to purchase an aggregate of 650,250 shares of our common stock (the "Warrants"). The shares were sold to the investors at a per share purchase price of \$0.25, resulting in approximately \$650,250 in aggregate proceeds to us. The Warrants have a three-year term, become exercisable six months after the date of their issuance, and have an exercise price of \$.44 (subject to adjustment as set forth in the Warrants).

Pursuant to the terms of the Purchase Agreement, the investors have certain piggyback registration rights with respect to the shares sold pursuant to the Purchase Agreement, the Warrants and the shares issuable upon exercise of the Warrants, which rights are subject to certain conditions as set forth in the Purchase Agreement and are applicable in the event that we propose to register under the Securities Act of 1933 (the "Securities Act") any of our capital stock or other securities in connection with a public offering of such securities pursuant to a registration statement filed on or after the three month anniversary of the closing under the Purchase Agreement.

Bridge Loan Transaction

On June 26, 2012 we entered into an agreement under which we could borrow a maximum of \$1,200,000 in exchange for our issuance of Secured Convertible Notes in the principal amount of \$1,334,333 in a transaction we refer to as the "Bridge Loan". On July 9, 2012, we closed the Bridge Loan and received cash consideration in the amount of \$1,200,000 from nine lenders. Under the terms of the Bridge Loan we issued nine (9) identical (except for the amount loaned) Secured Convertible Notes in favor of the lenders in the aggregate principal amount of \$1,334,333,000. The proceeds of the Bridge Loan will be used for general corporate purposes.

The Secured Convertible Notes have an interest rate of -0-% so long as we repay the principal balance on or before December 26, 2012 and there is no other event of default; there is a one-time interest charge of 10% if we fail to repay the entire balance of the Secured Convertible Notes by December 26, 2012. The Secured Convertible Notes are secured by a lien on all of our assets pursuant to a Security Agreement. The Secured Convertible Notes are also convertible, at the option of the Lenders, into shares of our common stock if the entire balance is not repaid by December 26, 2012 or if an event of default has occurred; the price for the conversion is \$0.41 per share subject to certain adjustments, which could result in the issuance of 3,254,472 shares of our common stock.

As additional consideration for the Bridge Loan, we also provided or issued, as appropriate, to each of the Lenders at closing: (i) that number of shares of our common stock equal to 15% of the actual investment of each Lender, based on a price of \$0.41 per share (resulting in the issuance of 439,026 shares of our common stock to the Lenders); (ii) a 10% original issue discount on the Secured Convertible Notes so that each Lender remitted to us 90% of the principal amount of their respective Secured Convertible Note (resulting in the Lenders investing a total of \$1,200,000 to us); (iii) warrants to acquire that number of shares of our common stock equal to 35% of the actual investment of each Lender, at a purchase price of \$0.41 per share subject to certain adjustments, with a term of 4 years (resulting in the issuance of warrants to acquire 1,024,390 shares of our common stock, subject to certain adjustments); and, (iv) we issued 4,600,000 share of our common stock as additional collateral for the timely repayment of the Secured Convertible Notes. Both the Secured Convertible Notes and the Warrants provide for full-ratchet anti-dilution

protection in the event that any shares of our common stock, or securities convertible into common stock, are issued at less than the conversion price of the Secured Convertible Note or exercise price of the Warrants then in effect, subject to customary exceptions. We are subject to certain liquidated damages if we fail to timely effectuate a conversion under the terms of the Secured Convertible Notes. All agreements and documents entered into or delivered as part of the Bridge Loan were done so pursuant to a Securities Purchase Agreement we entered into with each of the Lenders.

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The Warrants may be exercised on a cashless basis if after the six month anniversary of the closing date of the Bridge Loan there is no effective registration statement registering the shares underlying the Warrants. If on or before September 24, 2012 we consummate a registered public offering of our securities resulting in gross proceeds to us of at least \$4,000,000 at a price per share that is lower than \$.41 (subject to adjustment for stock splits dividends, distributions, recapitalizations and the like), then the number of shares of common stock subject to the Warrant will be increased by using such lower price. The price used shall also be the exercise price of the Warrants.

Our obligations under the Secured Convertible Notes are guaranteed by a pledge of all assets of the Company pursuant to a Security Agreement. As noted above, we also issued 4,600,000 shares of our common stock as additional collateral on the Secured Convertible Notes pursuant to the Security Agreement and a Stock Escrow Agreement.

Each of the Lenders executed, or received as appropriate, the Securities Purchase Agreement, Secured Convertible Note, Security Agreement, Stock Escrow Agreement, Common Stock Purchase Warrants, and an Addendum to Transaction Documents (which we collectively refer to as the "Loan Agreements"). The Loan Agreements contain representations and warranties of the Company, as well as affirmative and negative covenants imposed by us and accepted as obligations of the Company. The Loan Agreements also contain customary events of default, including nonpayment of principal, interest, fees or other amounts when due; violation of covenants, subject in certain cases to stated grace periods; the attachment or seizure of a substantially all of our assets; the occurrence of certain bankruptcy events; the prevention by governmental authorities of the conduct of a material part of our business; the occurrence of certain payment defaults in respect of other indebtedness; the handing down of certain material judgments adverse to the Company; and inaccuracy of representations and warranties. If an event of default occurs and is continuing, we may be required to repay all amounts outstanding under the Loan Agreements. The Lenders may elect to accelerate the maturity of amounts due under the Loan Agreements upon the occurrence and during the continuation of an event of default.

RISK FACTORS

Investing in our securities has a high degree of risk. You should carefully consider the following information about risks and uncertainties that may affect us or our business, together with the other information contained and incorporated by reference in this prospectus, including our consolidated financial statements and the related notes incorporated by reference herein. If any of the following events, described as risks, actually occur, either alone or taken together, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected. In those circumstances, the market price of our common stock could decline, and you may lose all or part of your investment in our securities. An investment in our securities is speculative and involves a high degree of risk. You should not invest in our securities if you cannot bear the economic risk of your investment for an indefinite period of time and cannot afford to lose your entire investment. There may be additional risks that we do not presently know of or that we currently believe are immaterial which could also impair our business and financial position.

Risks Related to Our Business and Industry

We will need to raise additional capital in order to continue operating our business, continue to develop new products and technologies, and service our debt, and such additional funds may not be available on acceptable terms or at all.

We have not generated, and may never generate, significant cash from operations and must raise additional funds in order to continue operating our business. Our cash outflows for operating activities and for investments in patents and fixed assets were \$4.2 million in the nine months ended April 30, 2012, and \$6.4 million in the year ended July 31, 2011. Cash outflows may be greater in future periods.

Our capital requirements will depend on many factors, including, among other factors:

- the acceptance of, and demand for, our products;
- our success and that of our strategic partners in developing and selling products derived from our technology;
- our continued listing on NASDAQ;
- the costs of further developing our existing, and developing new, products or technologies;
- the extent to which we invest in new technology, testing and product development;
- the timing of vendor payments and of the collection of receivables, among other factors affecting our working capital;
- the exercise of outstanding options or warrants to acquire our common stock;
- the number and timing of acquisitions and other strategic transactions, if any; and
- the costs associated with the continued operation, and any future growth, of our business.

We will need to increase our liquidity and capital resources in the near term and in future periods to continue our operations and further develop our products and technologies and to service our debt, including though not limited to our obligations under the Bridge Loan. We have terminated our purchase agreements with Lincoln Park Capital Fund, LLC, or Lincoln Park, for sales of our common stock, on which we have recently relied to raise capital. We anticipate that we will require additional capital in future periods to continue our operations and further develop our products and technologies. Until we can generate a sufficient amount of revenue to finance our cash requirements, which we may never do, we expect to increase our liquidity and capital resources by one or more measures, which may include reducing operating expenses, raising additional financing through the issuance of debt, equity, or convertible securities, entering into partnerships, licenses, or other arrangements with third parties, reducing the exercise price of outstanding warrants, or through other means, any one of which could reduce the value to us, perhaps substantially, of our technology and its commercial potential. There is no guarantee that we will be able to obtain capital on terms acceptable to us, or at all. Insufficient funds would result in a material adverse effect on our business and operations and could cause us to fail to execute our business plan, fail to take advantage of future opportunities, or fail to respond to competitive pressures or customer requirements, and further may require us to delay, scale back or eliminate some or all of our research and product development programs, license to third parties the right to commercialize products or technologies that we would otherwise commercialize ourselves, to reduce or cease operations, or otherwise significantly modify our business model or cease operations altogether. Modification of our business model and operations could result in an impairment of assets, which cannot be determined at this time. Furthermore, if we issue equity or convertible debt securities to raise additional funds, our existing stockholders may experience dilution, and the new equity or debt securities may have rights, preferences and privileges that are superior to those of our existing stockholders. If we incur debt, it may increase our leverage relative to our earnings or to our equity capitalization.

We have a history of losses, and we may not achieve or maintain profitability.

We had a net loss of \$6.4 million for the nine months ended April 30, 2012, and a net loss of \$8.3 million for the year ended July 31, 2011. As of April 30, 2012, we had an accumulated deficit of approximately \$60.0 million. Although we expect to continue to have losses in future periods, we are unable to predict the extent of our future losses or when or if we will become profitable, and it is possible we will never become profitable. Even if we do achieve profitability, we may not be able to sustain or increase profitability on an ongoing basis.

None of our existing agreements contain provisions that guarantee us any minimum revenues. If the penetration into the marketplace of SDC and SDC-based products is unsuccessful, revenue growth is slower than anticipated or operating expenses exceed expectations, it may take an unforeseen period of time to achieve or maintain profitability and we may never achieve or maintain profitability. Slower than anticipated revenue growth could force us to reduce research, testing, development and marketing of our technologies, and/or force us to reduce the size and scope of our operations, to sell or license our technologies to third parties, or to cease operations altogether.

The risks associated with our business may be more acute during periods of economic slowdown or recession. In addition to other consequences, these periods may be accompanied by decreased consumer and institutional spending in general, as well as decreased demand for, or additional downward pricing pressure on, our products. Accordingly, any prolonged economic slowdown or a lengthy or severe recession with respect to either the U.S. or the global economy is likely to have a material adverse effect on our results of operations, financial condition and business prospects. As a result, given the current weakness and uncertainties in the U.S. and in certain overseas economies, we expect that our business will continue to be adversely affected for so long as, and to the extent that, such adverse economic conditions and uncertainty exist.

We have incurred substantial indebtedness which we may not be able to repay in a timely manner.

We have incurred substantial indebtedness as a result of the closing of the Bridge Loan discussed earlier in this registration statement. We have outstanding loans in the amount of \$1,333,333 in the form of the secured convertible promissory notes. All such debt is payable within 180-days. Our level of indebtedness increases the possibility that we may be unable to generate cash or raise additional funds sufficient to pay, when due, the amounts due on the secured convertible notes. Our indebtedness, combined with other financial obligations and contractual commitments, could:

- make it more difficult for us to satisfy our obligations with respect to the indebtedness and any failure to comply with the obligations under any of our debt instruments, including restrictive covenants, could result in event of defaults under the agreements and instruments governing the indebtedness;
- require us to dedicate a substantial portion of our cash flow from operations to payments on indebtedness, thereby reducing funds available for working capital, capital expenditures, acquisitions, research and development and other corporate purposes;
- increase our vulnerability to adverse economic and industry conditions, which could place us at a competitive disadvantage compared to competitors that have relatively less indebtedness;
- limit our flexibility in planning for, or reacting to, changes in business and the industry in which we operate; and
- limit our ability to borrow additional funds, or to dispose of assets to raise funds, if needed, for working capital, capital expenditures, acquisitions, research and development and other corporate purposes.

We may incur significant additional indebtedness in the future. If we incur a substantial amount of additional indebtedness, the related risks that we face could become more significant. Additionally, the terms of any future debt

that we may incur may impose requirements or restrictions that further affect our financial and operating flexibility or subject us to other events of default.

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Litigation or the actions of regulatory authorities may harm our business or otherwise distract our management.

Even though we have reached a Settlement of the Richmond Litigation, the litigation caused us to incur significant expenditures and was a distraction to our management. Other substantial, complex or extended litigation could cause us to incur major expenditures and would distract our management. Lawsuits or actions could from time to time be filed against us and/or our executive officers and directors. For example, lawsuits by employees, former employees, stockholders, partners, customers, or others, or actions taken by regulatory authorities, could be very costly and substantially disrupt our business. Such lawsuits and actions are not uncommon, and we may not be able to resolve such disputes or actions on terms favorable to us, and there may not be sufficient capital resources available to defend such actions effectively, or at all.

Raising additional funds by issuing securities or through collaboration and licensing arrangements, or other issuances of our securities, may cause dilution to existing stockholders, restrict our operations or require us to relinquish proprietary rights.

We expect that we will need to increase our liquidity and capital resources in our current fiscal year and in future periods. We have a history of raising funds through offerings of our common stock, and we may in the future raise additional funds through public or private equity offerings, debt financings or corporate collaborations and licensing arrangements. To the extent that we raise additional capital by issuing equity securities, our stockholders' ownership will be diluted. Any debt financing we obtain may involve covenants that restrict our operations. These restrictive covenants may include, among other things, limitations on borrowing, specific restrictions on the use of our assets, as well as prohibitions on our ability to create liens on our assets, pay dividends on or redeem our capital stock or make investments. In addition, if we raise additional funds through collaboration and licensing arrangements, it may be necessary to grant licenses on terms that are not favorable to us or relinquish potentially valuable rights to our products or proprietary technologies. We may be required in future collaborations to relinquish all or a portion of our sales and marketing rights with respect to our products or license intellectual property that enable licensees to develop competing products in order to complete any such transaction.

Our authorized common stock is 100,000,000 shares. In addition to capital raising activities, other possible business and financial uses for our authorized common stock include, without limitation, future stock splits, acquiring other companies, businesses or products in exchange for shares of common stock, issuing shares of our common stock to partners in connection with strategic alliances, attracting and retaining employees by the issuance of additional securities under our various equity compensation plans, or other transactions and corporate purposes that our Board of Directors, or Board, deems are in the Company's best interest. Additionally, shares of common stock could be used for anti-takeover purposes or to delay or prevent changes in control or management of the Company. For example, without further stockholder approval, our Board could approve the sale of shares of common stock in a private transaction to purchasers who may oppose a takeover or favor our current Board. We cannot provide assurances that any issuances of common stock will be consummated on favorable terms or at all, that they will enhance stockholder value, or that they will not adversely affect our business or the trading price of our common stock.

Under our Certificate of Incorporation, our Board could also authorize the issuance of up to 5,000,000 shares of preferred stock on terms determined by the Board. If any common or preferred stock is issued, the interests of holders of our common stock could be diluted, and shares of preferred stock could be issued in a financing in which investors purchase preferred stock with rights, preferences and privileges that may be superior to those of the common stock, and the market price of our common stock could decline.

If outstanding options and warrants to purchase shares of our common stock are exercised, or we default on our recent Bridge Loan transaction, the interests of our stockholders could be diluted.

As of July 23, 2012, in addition to 57,702,100 shares of common stock issued and outstanding, we currently have 6,121,490 shares of common stock reserved for issuance under our equity compensation plans or upon exercise of outstanding stock options or warrants. Of that number, 2,737,750 shares were reserved for issuance under equity compensation plans for vested and unvested stock options. We also have 3,383,740 shares reserved for issuance on the exercise of outstanding warrants. We may elect to reduce the exercise price of outstanding warrants as a means of providing additional financing to us.

The Secured Convertible Notes are also convertible, at the option of the Lenders, into shares of our common stock if the entire balance is not repaid by December 26, 2012 or there is an event of default; the price for the conversion is \$0.41 per share subject to certain adjustments, which could result in the issuance of 3,254,472 shares of our common stock. If on or before September 24, 2012 we consummate a registered public offering of our securities resulting in gross proceeds to us of at least \$4,000,000 at a price per share that is lower than \$.41 (subject to adjustment for stock splits dividends, distributions, recapitalizations and the like), then the number of shares of common stock subject to the Warrant issued in the Bridge Loan will be increased by using such lower price. The price used shall also be the exercise price of the Warrants.

We could be negatively affected as a result of another proxy fight.

As noted above, as part of the settlement of the Richmond Litigation the threatened proxy fight with Richmond Corporation and the Coalition has been terminated. However, that will not stop another shareholder or group of shareholders from threatening or actually conducting another proxy fight. If a proxy contest results from actions by any of our shareholders our business could be adversely affected because:

- responding to proxy contests and other actions by insurgent stockholders can be costly and time-consuming, disrupting our operations and diverting the attention of management and our employees;
- perceived uncertainties as to our future direction may harm our ability to attract new investors in order to raise capital, and may impact our existing and potential collaborations or strategic relationships and make it more difficult to attract and retain qualified personnel; and
- if individuals are elected to our Board of Directors with a specific agenda, it may adversely affect our ability to effectively and timely implement our strategic plan.

Because we are an early stage company, it is difficult to evaluate our prospects; our financial results may fluctuate and these fluctuations may cause our stock price to fall.

Since acquiring the rights to our SDC technology, we have encountered and likely will continue to encounter risks and difficulties associated with introducing or establishing our products in rapidly evolving markets. These risks include the following, among others:

- we may not increase our sales to our existing customers and/or expand our customer base;
- we may not succeed in materially penetrating markets and applications for our SDC technology;
- we or our partners and/or distributors may not establish or maintain effective marketing programs and create product awareness or brand identity;

- our partners' and/or distributors' goals and objectives may not be consistent with our own;

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- we may not attract and retain key business development, technical and management personnel;
- we may not maintain existing, or obtain new, regulatory approvals for our technology and products;
- we may not succeed in locating strategic partners and licensees of our technology;
- we may not effectively manage our anticipated growth, if any; and
- we may not be able to adequately protect our intellectual property.

In June 2011 we terminated our contract with Richmond Sciences as our exclusive marketing agent for the SDC-based hard surface disinfectant and other products. After the termination we began launching a multi-channel national sales program for which we have developed an internal team of industry sales experts to manage each of our key channels; food service and food processing, education, law enforcement and correctional facilities and all other janitorial/sanitation markets. Within those channels we are in the process of deploying contract sales representative in order to maximize efficiency and speed to market while minimizing expenses. There is a risk that this new model may not significantly increase our sales.

Any failure to successfully address these risks and uncertainties could seriously harm our business and prospects. We may not succeed given the technological, marketing, strategic and competitive challenges we face. In addition, because of our limited operating history and the early stage of market development for our SDC technology, we have limited insight into trends that may emerge and affect our business. Forecasting future revenues is difficult, especially because our technology is novel, and market acceptance of our products could change rapidly. In addition, our customers and potential customers in the foreseeable future are highly concentrated. Fluctuations in the buying patterns of our current or potential customers could significantly affect the level of our sales on a period to period basis. As a result, our financial results could fluctuate to an extent that may adversely affect our stock price. There are a number of other factors that could cause our financial results to fluctuate unexpectedly, including product sales, the mix of product sales, the cost of product sales, our ability for any reason to be able to meet demand, the achievement and timing of research and development and regulatory milestones, changes in expenses, including non-cash expenses such as the fair value of stock options granted, and manufacturing or supply issues, among other issues.

We are dependent on our core SDC technology and if our efforts to achieve or maintain market acceptance of our core SDC technology are not successful, we are unlikely to attain profitability.

We have and are currently focusing substantially all of our time and financial resources in the development and commercialization of our core SDC technology. Although we believe SDC has applications in multiple industries, we expect that sales of SDC personal care, cleaners and hard surface disinfectant products will constitute a substantial portion, or all, of our revenues in future periods. Any material decrease in the overall level of sales or expected sales of, or the prices for, SDC, whether as a result of competition, change in customer demand, or any other factor, would have a materially adverse effect on our business, financial condition and results of operations. We are marketing our new antimicrobial silver ion technology to industrial and consumer markets. These products have not yet been accepted into the marketplace, and may never be accepted. In addition, even if our products achieve market acceptance, we may not be able to maintain product sales or other forms of revenue over time if new products or technologies are introduced that are more favorably received than our products, are more cost-effective or otherwise render our products less attractive or obsolete.

We are subject to intense competition.

Our SDC-based products compete in highly competitive markets dominated by prominent chemical and pharmaceutical companies. Most of our competitors have been in business for a longer period of time than us, have a greater number of products on the market and have greater financial and other resources than we do. Many of our competitors already have well established brands and distribution capabilities, and in some cases are able to leverage

the sale of other products with more favorable terms for products competing with our own. We also have significantly fewer employees than virtually all of our competitors. Furthermore, recent trends in this industry are for large chemical and pharmaceutical companies to consolidate into a smaller number of very large entities, which further concentrates financial, technical and market strength and increases competitive pressure in the industry. If we directly compete with these very large entities for the same markets and/or products, their financial strength could prevent us from capturing a share of those markets. It is also possible that developments by our competitors will make our technologies or products noncompetitive or obsolete. Our ability to compete will depend upon our ability, and the ability of our distributors and other partners, to develop brand recognition and novel distribution methods, and to displace existing, established and future products in our relevant target markets. We, or our distributors and partners, may not be successful in doing so, which would have a materially adverse effect on our business, financial condition and results of operations.

We have limited sales, marketing and product distribution experience.

We have limited experience in the sales, marketing and distribution of our products and have previously relied primarily on product distribution arrangements and/or sales and marketing services provided by third parties.

We recently developed and obtained registration from the U.S. Environmental Protection Agency, or the EPA, of our proprietary new brand, PURE™ Hard Surface disinfectant and food contact surface sanitizer, to resume direct control of our sales of this product through a restructuring of our sales strategy and operations. We intend to market and sell our PURE Hard Surface product into consumer, commercial and institutional markets, including the food processing industry, through both traditional and alternative distribution channels. We have recently resumed direct control of our sales and marketing of this product, which requires that we enact various operational changes in our business, including making significant investments in our own sales and marketing organization, and we expect in some cases to pay sales commissions to sales representatives. We may not be able to establish such sales, marketing, and distribution capabilities. If we are not able to successfully sell, market and distribute this product directly, we may seek to establish product distribution arrangements with third parties, which may not be available on terms acceptable to us, if at all.

We expect to rely on third parties to develop SDC-based products, and they may not do so successfully or diligently.

We rely in part, and expect to rely in the future, on third parties to whom we license rights to our technology to develop and commercialize products containing SDC for many of the applications for which we believe SDC-based products have, or may have, market opportunities. We have license agreements or arrangements with nine companies, and additional such agreements or arrangements with affiliated entities of those nine companies.

Our reliance on these third parties for development activities reduces our control over these activities. In such arrangements, we have relied, and expect in the future to rely, on the potential third party to fund and direct product development activities and appropriate regulatory filings. Any of these third parties may not be able to successfully develop such SDC-based products due to, among other factors, a lack of capital, a lack of appropriate diligence, insufficient devotion to sales efforts, a change in the evaluation by the third party of the market potential for SDC-based products, technical failures, and poorer than expected results from testing or trial use of any products that may be developed. If the third parties on which we rely are not successful in such development activities, our business and operating results would be adversely affected.

If we are unable to successfully develop or commercialize new applications of our SDC technology, or if such efforts are delayed, our operating results will suffer.

In addition to its use on inanimate surfaces, we are pursuing applications of our SDC technology as a broad-spectrum antimicrobial for use in human and veterinary healthcare products. Any product developed may be delayed or may never achieve regulatory approval or be commercialized. Delays in achieving regulatory approvals for particular applications of our products could significantly impact our product development costs. If indications are commercialized, we may not receive a share of future revenues that provides an adequate return on our historical or future investment.

If we are not able to manage any growth we achieve effectively, we may not become profitable.

If our efforts to achieve and maintain market acceptance of our SDC technology are successful, we will need to expand our business operations. There can be no assurance that we will have sufficient resources to do. There also can be no assurance that if we continue to invest in additional infrastructure, we will be effective in expanding our operations or that our systems, procedures or controls will be adequate to support such expansion. In addition, we would need to provide additional sales and support services to our partners, potentially in multiple markets. Failure to properly manage increased customer demands, if any, could result in a material adverse effect on customer satisfaction, our ability to meet our contractual obligations, and on our operating results.

The industries in which we operate are heavily regulated and we may be unable to compete effectively.

We are focused on the marketing and continued development of our SDC antimicrobial technology. We believe that all products derived from our SDC technology, or products that may be derived from our SDC technology in future periods, require or will require approval by government agencies prior to marketing or sale in the U.S. or in foreign markets. Complying with applicable government regulations and obtaining necessary approvals can be, and has historically been, time consuming and expensive, due in part, we believe, to the novel nature of our technology. Regulatory review could involve delays or other actions adversely affecting the development, manufacture, marketing and sale of our products. While we cannot accurately predict the outcome of any pending or future regulatory review processes or the extent or impact of any future changes to legislation or regulations affecting review processes, we expect such processes to remain time consuming and expensive as we, or our partners, apply for approval to make new or additional efficacy claims for current products or to market new product formulations. Obtaining approvals for new SDC-based products in the U.S., or in markets outside the U.S., could take several years, or may never be accomplished.

SDC is a platform technology rather than a single use applied technology. As such, products developed from the platform fall under the jurisdiction of multiple U.S. and international regulatory agencies. Our disinfectant and sanitizer products are regulated in the U.S. by the EPA. In addition to the EPA, each of the 50 United States has its own government agencies that regulate the sale or shipment of our products into their state. We have obtained registration for these products from the EPA and all states into which such products are currently marketed and sold. We are required to meet certain efficacy, toxicity and labeling requirements and pay ongoing fees in order to maintain such registrations. We may not be able to maintain these registrations in the future, which may eliminate our continued ability to market and sell our products in some or all parts of the U.S. We also may not be able to obtain necessary registrations with the EPA and applicable states for other SDC disinfectant and sanitizer products that we or our partners may develop, which would limit our ability to sell any such products in the future.

Some potential applications of SDC, such as those aimed at healthcare, veterinary and certain food preparation markets, may require approval of other government agencies prior to marketing or sale in the U.S. or in foreign markets, such as the U.S. Food and Drug Administration, or the FDA. Obtaining FDA approval is a complicated and expensive process and such approvals may never be obtained for any SDC products. If FDA approvals are obtained, the approvals may limit the uses for which SDC products may be marketed such that they may not be profitable to us, and the applicable products would be subject to pervasive and continuing regulation by the FDA that could lead to withdrawal of product approvals.

We intend to fund and manage certain of our EPA-regulated product development internally, in conjunction with our regulatory consultants and by partnering with other third parties. We have partnered, or intend to partner, with third parties who are seeking, or intend to seek, approvals to market SDC-based products in markets outside the U.S., and with other third parties who are developing FDA-regulated SDC-based products who, upon such development, would seek FDA approvals of such products. Our ability to market and sell our products is dependent on our and our partners' ability to obtain and maintain required registrations and approvals of applicable regulatory agencies. Failure by our partners or us to comply with applicable regulations could result in fines or the withdrawal of approval for us or our partners and distributors to market our products in some or all jurisdictions, which could cause us to be unable to successfully commercialize SDC or otherwise achieve revenues from sales of such products.

We are subject to substantial regulation related to quality standards applicable to our manufacturing and quality processes and our failure to comply with applicable quality standards could affect our ability to commercialize SDC products.

The EPA and other applicable U.S. and foreign government agencies regulate our and our partners' systems and processes for manufacturing SDC-based products. These regulations require that we and our partners observe "good manufacturing practices" in order to ensure product quality, safety and effectiveness. Failure by us or our partners to comply with current or future government regulations and quality assurance guidelines could lead to temporary manufacturing shutdowns, product recalls or related field actions, product shortages, and/or delays in product manufacturing, any or all of which could cause significant cost to us. Further, efficacy or safety concerns and/or manufacturing quality issues with respect to our products or those of our partners could lead to product recalls, fines, withdrawal of approvals, and/or declining sales, any or all of which could result in our failure to successfully commercialize SDC or otherwise achieve revenue growth.

Pricing and supply issues may have a material impact on our margins and our ability to supply our customers.

All of the supply ingredients used to manufacture our products are available from multiple suppliers. However, commodity prices for some ingredients can vary significantly and the margins that we are able to generate could decline if prices rise. For example, both silver and citric acid prices have been volatile in recent periods.

In addition to such commodities, for finished products we also rely on producers of specialized packaging inputs such as bottles and labels. Due to their specialized nature, the supply of such inputs can be periodically constrained, and result in additional costs to obtain these items, which may in turn inhibit our ability to supply products to our customers.

We are generally unable to raise our product prices to our customers, partners and distributors quickly to maintain our margins, and significant price increases for key inputs could therefore have an adverse effect on our results of operations. Price increases can also result in lost sales, and any inability to supply our customers' orders can lead to lost future sales to such customers.

While we expect to be the sole source supplier of SDC concentrate, in future periods we may use third parties to blend, package and provide fulfillment activities for our finished products. We expect that our margins would be reduced by using such third parties, and our ability to maintain product quality may not be as extensive or effective as when we produce these products in our own facility(ies). Any quality control issues could lead to product recalls and/or the loss of future sales, which would reduce our revenues and/or profits.

If we suffer negative publicity concerning the safety or efficacy of our products, our sales may be harmed.

If concerns should arise about the safety or efficacy of any of our products that are marketed, regardless of whether or not such concerns have a basis in generally accepted science or peer-reviewed scientific research, such concerns could adversely affect the market for those products. Similarly, negative publicity could result in an increased number of product liability claims, whether or not those claims are supported by applicable law.

If a natural or man-made disaster strikes our manufacturing facility, we may be unable to manufacture our products for a substantial amount of time and our sales and profitability may decline.

Our sole manufacturing facility and the manufacturing equipment we use to produce our products would be costly to replace and could require substantial lead-time to repair or replace. The facility may be affected by natural or man-made disasters and in the event they were affected by a disaster, we would be forced to set up alternative production capacity or rely on third party manufacturers to whom we would have to disclose our trade secrets. Although we possess insurance for damage to our property and the disruption of our business, such insurance may not be sufficient to cover all of our potential losses, may not continue to be available to us on acceptable terms, or at all, and may not address the marketing and goodwill consequences of our inability to provide products to meet customers' requirements.

We may become subject to product liability claims.

As a business that manufactures and markets products for use by consumers and institutions, we may become liable for any damage caused by our products, whether used in the manner intended or not. Regardless of merit or potential outcome, product liability claims against us may result in, among other effects, the inability to commercialize our products, impairment of our business reputation, and distraction of management's attention from our primary business. If we cannot successfully defend ourselves against product liability claims we could incur substantial liabilities. Although we maintain general and product liability insurance, our insurance may not cover potential claims and may not be adequate to indemnify for liabilities that may be imposed. Any imposition of liability that is not covered by insurance or is in excess of insurance coverage could harm our business and operating results.

Maintaining compliance with our obligations as a public company may strain our resources and distract management, and if we do not remain compliant our stock price may be adversely affected.

Our common stock is registered under the Securities Exchange Act of 1934, as amended, or the Exchange Act. It is therefore subject to the information, proxy solicitation, insider trading and other restrictions and requirements of the SEC under the Exchange Act. Both the U.S. Congress and the SEC continue to issue new and proposed rules, and complying with existing and new rules has caused, and will continue to cause, us to devote significant financial and other resources to maintain our status as a public company. In addition, in April 2008 we obtained a listing of our common stock on the NASDAQ Capital Market, adding the additional cost and administrative burden of maintaining such a listing. We are currently working with NASDAQ to retain our listing on NASDAQ after receiving multiple letters threatening us with delisting. This is discussed in greater detail in the below risk factor titled "We may not be able to maintain our NASDAQ listing". These additional regulatory costs and requirements will reduce our future profits or increase our future losses, and an increasing amount of management time and effort will be needed to meet our regulatory obligations.

We are required to evaluate our internal control systems in order to allow management to report on our internal controls as required by Section 404 of the Sarbanes-Oxley Act of 2002, and our management is required to attest to the adequacy of our internal controls. Recent SEC pronouncements suggest that in the next several years we may be required to report our financial results using new International Financial Reporting Standards, replacing GAAP, which would require us to make significant investments in training, hiring, consulting and information technology, among

other investments. All of these and other reporting requirements and heightened corporate governance obligations that we face, or will face, will further increase the cost to us, perhaps substantially, of remaining compliant with our obligations under the Exchange Act and other applicable laws, including the Sarbanes-Oxley Act and the Dodd-Frank Act of 2010. In order to meet these incremental obligations, we will need to invest in our corporate and accounting infrastructure and systems, and acquire additional services from third party auditors and advisors. As a result of these requirements and investments, we may incur significant additional expenses and may suffer a significant diversion of management's time. There is no guarantee that we will be able to continue to meet these obligations in a timely manner. If we fail to do so we could be subject to sanctions or investigation by regulatory authorities such as the SEC or the NASDAQ Capital Market, and our common stock would likely be delisted from NASDAQ. Any such actions could adversely affect the market price of our common stock, perhaps significantly.

Our publicly-filed reports are reviewed from time to time by the SEC, and any significant changes or amendments required as a result of any such review may result in material liability to us and may have a material adverse impact on the trading price of our common stock.

The reports and other securities filings of publicly-traded companies are subject to review by the SEC from time to time for the purpose of assisting companies in complying with applicable disclosure requirements. The SEC is required, pursuant to the Sarbanes-Oxley Act of 2002, to undertake a comprehensive review of a company's reports at least once every three years, although an SEC review may be initiated at any time. While we believe that our previously filed SEC reports comply, and we intend that all future reports will comply, in all material respects with the published rules and regulations of the SEC, we could be required to modify, amend or reformulate information contained in our filings as a result of any SEC review. Any modification, amendment or reformulation of information contained in such reports could be significant and result in material liability to us and have a material adverse impact on the trading price of our common stock.

We are dependent on our management team.

Our success depends largely upon the continued services of our executive officers and other key personnel. Our executive officers and key personnel could terminate their employment with us at any time without notice and without penalty.

We do not maintain key person life insurance policies on our executive officers or other employees, other than Michael L. Krall, our President, Chief Executive Officer and Interim Financial Officer. The policy we have on Mr. Krall would likely not provide a benefit sufficient to offset the financial losses resulting from the loss of Mr. Krall's future services. The loss of one or more of our executive officers or key employees could seriously harm our business, results of operations, financial condition, and/or the market price of our common stock. We cannot assure you that in such an event we would be able to recruit qualified personnel able to replace these individuals in a timely manner, or at all, on terms acceptable to either us or to any qualified candidate.

In addition, on May 10, 2012, we announced that our former Chief Financial Officer, Craig Johnson, tendered his resignation from his position as our Chief Financial Officer. Mr. Johnson also previously served as our Principal Financial Officer and our Principal Accounting Officer. Mr. Johnson's last day at the Company was May 4, 2012. Effective May 11, 2012, Michael L. Krall was appointed as our Interim Chief Financial Officer, Principal Financial Officer and Principal Accounting Officer and will serve in such positions until a permanent Chief Financial Officer is appointed. This management transition could result in disruptions to our business and could cause our operations to suffer.

Because competition for highly qualified business development and bioengineering personnel is intense, we may not be able to attract and retain the employees we need to support our planned growth.

To successfully meet our objectives, we must continue to attract and retain highly qualified business development and bioengineering personnel with specialized skill sets focused on the industries in which we compete, or intend to compete. Competition for qualified business development and bioengineering personnel can be intense. Our ability to meet our business development objectives will depend in part on our ability to recruit, train and retain top quality people with advanced skills who understand our technology and business. In addition, it takes time for our new personnel to become productive and to learn our business. If we are unable to hire or retain qualified business development and bioengineering personnel, it will be difficult for us to sell our products or to license our technology, or to achieve or maintain regulatory approvals, and we may experience a shortfall in revenue and not achieve our anticipated, or any, growth.

We may engage in strategic transactions that could impact our liquidity, increase our expenses and present significant distractions to our management.

From time to time we may consider engaging in strategic transactions, such as acquisitions of companies, asset purchases and out-licensing or in-licensing of products, or technologies. Any such transaction may require us to incur non-recurring or other charges, may increase our near and long-term expenditures and may pose significant integration challenges or disrupt our management or business, which could adversely affect our operations and financial results. For example, these transactions may entail numerous operational and financial risks, including, among others, exposure to unknown liabilities, disruption of our business and diversion of our management's time and attention in order to develop acquired products or technologies, difficulty and cost in combining the operations and personnel of any acquired businesses with our operations and personnel, and inability to retain key employees of any acquired businesses. Accordingly, although we may not choose to undertake or may not be able to successfully complete any transactions of the nature described above, any transactions that we do undertake or complete could have a material adverse effect on our business, results of operations, financial condition and prospects.

We may invest or spend our cash in ways with which you may not agree or in ways which may not yield a significant return.

Our management has considerable discretion in the use of our cash. Our cash may be used for purposes that do not increase our operating results or market value. Until the cash is used, it may be placed in investments that do not produce significant income or that may lose value. The failure of our management to invest or spend our cash effectively could result in unfavorable returns and uncertainty about our prospects, each of which could cause the price of our common stock to decline.

We may not be able to utilize all, or any, of our tax net operating loss carry-forwards and our future after-tax earnings, if any, could be reduced.

At July 31, 2011, we had federal and California tax net operating loss carry-forwards of approximately \$64.7 million and \$54.6 million, respectively. Utilization of these net operating loss carry-forwards may be subject to a substantial annual limitation due to ownership change limitations that may have occurred or that could occur in the future, as required by Section 382 of the Internal Revenue Code as well as similar state provisions. These ownership changes may limit the amount of net operating loss carry-forwards that can be utilized annually to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382 of the Internal Revenue Code, results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50 percentage points of the outstanding stock of a company by certain stockholders or public groups. Since our formation, we have raised capital through the issuance of capital stock on several occasions (both before and after our initial public offering in 1996) which, combined with the purchasing stockholders' subsequent disposition of those shares, may have resulted in such an ownership change, or could result in an ownership change in the future based upon subsequent disposition. While we believe that we have not experienced an ownership change, the pertinent tax rules related thereto are complex and subject to varying interpretations, and thus complete assurance cannot be provided that the taxing authorities would not take an alternative position.

Our current federal tax loss carry-forwards began expiring in the year ended July 31, 2011 and, unless previously utilized, will completely expire in the year ending July 31, 2030. In the years ending July 31, 2012 and 2013, \$3.3 million of our federal net operating loss carry-forwards will expire, and the balance of our current federal net operating loss carry-forwards will expire between July 31, 2018 and July 31, 2030. Our California tax loss carry-forwards will begin to expire in the year ending July 31, 2014, and will completely expire in the year ending July 31, 2030. If we are unable to earn sufficient profits to utilize the carry-forwards by these dates, they will no longer be available to offset future profits, if any.

We are subject to tax audits by various tax authorities in multiple jurisdictions.

From time to time we may be audited by tax authorities to whom we are subject. Any assessment resulting from such audits, if any, could result in material changes to our past or future taxable income, tax payable or deferred tax assets, and could require us to pay penalties and interest that could materially adversely affect our financial results.

Risks Related to Our Intellectual Property

If we are unable to obtain, maintain or defend patent and other intellectual property ownership rights relating to our technology, we or our collaborators and distributors may not be able to develop and market products based on our technology, which would have a material adverse impact on our results of operations.

We rely and expect in the future to rely on a combination of patent, trademark, trade secret and copyright protections, as well as contractual restrictions, to protect the proprietary aspects of our technology and business.

Legal protections of our intellectual property and proprietary rights afford only limited protection. For instance, we currently own nine U.S. issued patents related to our SDC technology. These patents are summarized as follows:

Issued Patents

Patent Number	Title	Scope
7,803,407	Disinfectant and method of making	Disinfectant solution combining SDC and alcohol.
7,763,297	Disinfectant and method of use	Food products treated with SDC to remove or reduce pathogens.
7,732,486	Anhydrous silver dihydrogen citrate compositions	Anhydrous form of SDC.
7,601,755	Process for treating water	Process for treating water with SDC.
7,435,438	Disinfectant and method of use	Process for treating food products with SDC to remove or reduce pathogens.
7,261,905	Disinfectant and method of making	Silver-ion/organic acid complex. Includes methods to use other organic acids in place of citric acid.
6,890,953	Process for treating water	Process for treating impure water with SDC
6,583,176	Aqueous disinfectant	Aqueous SDC disinfectant solutions.
6,197,814	Disinfectant and method of making	Composition of SDC and method of making.

The lives of these patents, and any patents that we may obtain in the future, are not indefinite, and the value to us of some or all of our patents may be limited by their terms. Additionally, obtaining and maintaining patent protection depends on our compliance with various procedural, document submission, fee payment and other requirements imposed by government patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements. Furthermore, legal standards relating to the validity, enforceability and scope of patent protection and protections of other intellectual property and proprietary rights in the U.S. are uncertain. Additionally, to the extent that we operate internationally, the laws of foreign countries may not protect our proprietary rights to the same extent as the laws of the U.S. Many countries have a “first-to-file” trademark registration system, which may prevent us from registering or using our trademarks in certain countries if third parties have previously filed applications to register or have registered the same or similar trademarks. If certain of our proprietary rights cannot be, or are not sufficiently, protected by patents and trademark registrations, it could have a material adverse impact on our business and our ability to commercialize or license our technology and products.

Our own efforts to protect our intellectual property and other proprietary rights may also be insufficient. Despite efforts to protect our proprietary rights, our means of protecting such rights may not be adequate and unauthorized parties may attempt to copy aspects of our proprietary technology, obtain and use information that we regard as proprietary, or otherwise misappropriate our intellectual property. In addition, unpatented proprietary rights, including trade secrets and know-how, can be difficult to protect and may lose their value if they are independently developed by a third party or if their secrecy is lost. It is possible that, despite our efforts, competitors or others will create and

use products, adopt service names similar to our service names or otherwise violate or misappropriate our proprietary rights. The infringement of such rights could have a material negative impact on our business and on our results of operations.

Litigation may be necessary to enforce our intellectual property and other proprietary rights, which would be expensive and could consume time and other resources. The result of any such litigation may be the court's ruling that our patents or other intellectual property rights are invalid and/or should not be enforced. Additionally, even if the validity of such rights is upheld, the court could refuse to stop a third party's infringing activity on the ground that such activities do not infringe our rights. The U.S. Supreme Court has recently revised certain tests regarding granting patents and assessing the validity of patents to make it more difficult to obtain patents. As a consequence, issued patents may be found to contain invalid claims according to the newly revised standards. Some of our patents may be subject to challenge and subsequent invalidation or significant narrowing of claim scope in a reexamination proceeding, or during litigation, under the revised criteria.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date in the United States. The biotechnology patent situation outside the United States is even more uncertain. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our issued patents or in third-party patents.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- others may be able to make compounds that are competitive with our products but that are not covered by the claims of our patents;
 - it is possible that our pending patent applications will not result in issued patents;
- others may independently develop similar or alternative technologies or duplicate any of our technologies;
 - we may not develop additional proprietary technologies that are patentable; or
 - the patents of others may have an adverse effect on our business.

We also may rely on trade secrets to protect our technology, especially where we do not believe patent protection is appropriate or obtainable. However, trade secrets are difficult to protect. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors, outside scientific collaborators and other advisors may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third party illegally obtained and is using our trade secrets is expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how.

We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights and we may be unable to protect our rights to, or use, our technology.

If we choose to go to court to stop someone else from using the inventions claimed in our patents, that individual or company has the right to ask the court to rule that these patents are invalid and/or should not be enforced against that third party. These lawsuits are expensive and would consume time and other resources even if we were successful in stopping the infringement of these patents. In addition, there is a risk that the court will decide that these patents are not valid and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of these patents is upheld, the court will refuse to stop the other party on the ground that such other party's activities do not infringe our rights to these patents.

Furthermore, a third party may claim that we are using inventions covered by the third party's patent rights and may go to court to stop us from engaging in our normal operations and activities, including making or selling our products. These lawsuits are costly and could affect our results of operations and divert the attention of managerial and technical personnel. There is a risk that a court would decide that we are infringing the third party's patents and would order us to stop the activities covered by the patents. In addition, there is a risk that a court will order us to pay the other party damages for having violated the other party's patents. The biotechnology industry has produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If we are sued for patent infringement, we would need to demonstrate that our products or methods of use either do not infringe the patent claims of the relevant patent and/or that the patent claims are invalid, and we may not be able to do this. Proving invalidity, in particular, is difficult since it requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents.

Because some patent applications in the United States may be maintained in secrecy until the patents are issued, patent applications in the United States and many foreign jurisdictions are typically not published until eighteen months after filing, and publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications for technology covered by our issued patents or our pending applications or that we were the first to invent the technology. Our competitors may have filed, and may in the future file, patent applications covering technology similar to ours. Any such patent application may have priority over our patent applications and could further require us to obtain rights to issued patents covering such technologies. If another party has filed a United States patent application on inventions similar to ours, we may have to participate in an interference proceeding declared by the PTO, to determine priority of invention in the United States. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful, resulting in a loss of our United States patent position with respect to such inventions.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

Confidentiality agreements with employees and others may not adequately prevent disclosure of our trade secrets and other proprietary information and may not adequately protect our intellectual property, which could limit our ability to compete.

We may rely in part on trade secret protection in order to protect our proprietary trade secrets and unpatented know-how. However, trade secrets are difficult to protect, and we cannot be certain that others will not develop the same or similar technologies on their own. We have taken steps, including entering into confidentiality agreements with our employees, consultants, outside scientific collaborators, sponsored researchers and other advisors, to protect our trade secrets and unpatented know-how. These agreements generally require that the other party keep confidential and not disclose to third parties all confidential information developed by the party or made known to the party by us during the course of the party's relationship with us. We also typically obtain agreements from these parties which provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may not be honored and may not effectively assign intellectual property rights to us. Enforcing a claim that a party illegally obtained and is using our trade secrets or know-how is difficult, expensive and time consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets or know-how. The failure to obtain or maintain trade secret protection could adversely affect our competitive position.

We may be subject to claims that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is common in the biotechnology and pharmaceutical industry, we employ individuals who were previously employed at other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although no claims against us are currently pending, we may be subject to claims that these employees or we have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of their former employers. Litigation may be necessary to defend against these claims. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management.

Risks Related to our Common Stock

We may not be able to maintain our NASDAQ listing.

In April 2008, we obtained a listing for our common stock on the NASDAQ Capital Market. In order to maintain our listing, we must meet certain listing standards that include maintaining minimum thresholds of stockholders' equity, market value of our listed or publicly held securities, number of publicly held shares, bid price for our common stock, number of stockholders, number of market makers, and our net income. In addition, certain of our corporate governance policies are required to remain compliant with standards determined, and amended from time to time, by the NASDAQ Stock Market, or NASDAQ.

On September 16, 2011, we received a deficiency letter, or the Notification Letter, from NASDAQ notifying us that our common stock no longer met NASDAQ's requirements for continued listing on the NASDAQ Capital Market under NASDAQ Listing Rule 5550(a)(2), or the Bid Price Rule, because the minimum bid price of our common stock did not equal or exceed \$1.00 at least once over a period of 30 consecutive trading days prior to the date of the Notification Letter. Under NASDAQ Listing Rule 5810(c)(3)(A), we were afforded 180 calendar days, or until March 14, 2012, to regain compliance with the Bid Price Rule. We did not regain compliance with the Bid Price Rule by such date because the closing bid price of its common stock did not meet or exceed \$1.00 per share for at least 10 consecutive business days during the applicable 180-day period. Accordingly, on March 15, 2012, we received from NASDAQ a second deficiency letter, or the Second Notification Letter, notifying us that our common stock continued to be at risk of delisting from the NASDAQ Capital Market. As described in the Second Notification Letter, we were

not eligible for an additional grace period to regain compliance with the Bid Price Rule because, based on market information at that time and our stockholders' equity as reported in its Quarterly Report on Form 10-Q for the period ended October 31, 2011, we did not satisfy all applicable requirements for listing on the NASDAQ Capital Market under NASDAQ Listing Rule 5505. On March 23, 2012, we received from NASDAQ an additional deficiency letter, or the Third Deficiency Letter, notifying us that, based on our stockholders' equity as reported in our Quarterly Report on Form 10-Q for the period ended January 31, 2012, we did not satisfy the minimum stockholders' equity for continued listing on the NASDAQ Capital Market under NASDAQ Listing Rule 5550(b)(1), and that such failure served as an additional basis for delisting our common stock.

In accordance with NASDAQ's applicable procedures, we appealed NASDAQ's delisting determination by submitting to NASDAQ a written plan of compliance, which included our commitment to implement a reverse stock split of its common stock, and appearing before a NASDAQ Hearings Panel, or the Panel, at an oral hearing on May 17, 2012.

On June 21, 2012, we received from NASDAQ its decision letter, or the Decision Letter, regarding our appeal of the delisting determination, which notified us that the Panel has granted our request to remain listed on the NASDAQ Capital Market subject to our satisfaction of certain conditions specified in the Decision Letter. Among those conditions are that (i) we file a preliminary proxy statement no later than June 26, 2012 in order attempt to obtain the approval of our stockholders of a reverse stock split, (ii) we are able to consummate certain capital-raising transactions in accordance with specified deadlines provided in the Decision Letter, (iii) on or before August 20, 2012, we provide evidence to the Panel that the closing bid price of our common stock has been \$1.00 or more for a minimum of ten consecutive trading days, and (iv) we keep NASDAQ updated regarding our progress toward satisfying the conditions set forth in (i), (ii) and (iii) above.

We filed our preliminary proxy statement with the Securities and Exchange Commission on June 25, 2012, in compliance with the timing requirement therefor set forth in the Decision Letter. Additionally, we are currently pursuing certain capital-raising activities in order to attempt to satisfy the requirements set forth in the Decision Letter relating to such transactions. If we fail to timely satisfy the conditions established by NASDAQ, the Panel will conclude that our Written Plan of Compliance is uncertain or will take longer than represented to execute, and will immediately delist our common stock. We expect that we will continue our efforts to satisfy all requirements set forth by the Panel in order to maintain our NASDAQ listing, but those efforts may not be successful and our common stock may be delisted from the NASDAQ Capital Market if it is not able to meet the conditions that the Panel has, or may in the future, require. Such delisting could cause our common stock to be classified as “penny stock,” among other potentially detrimental consequences, any of which could significantly impact your ability to sell your shares of our common stock or to sell your shares at a price that you may deem to be acceptable.

The price of our common stock may be volatile, which may cause investment losses for our stockholders.

The price and trading volume of our common stock have historically been volatile. For example, in the twelve months through July 23, 2012, the closing market price of our common stock ranged from \$0.24 per share to \$1.11 per share, and the monthly trading volume varied from approximately 1.8 million shares to 4.8 million shares. The market price of our common stock may continue to be volatile and could fluctuate substantially due to many factors, including, among others, the following:

- actual or anticipated fluctuations in our results of operations;
- the sale by us of our common or preferred stock or other securities, or the anticipation of sales of such securities;
- the trading volume of our common stock, particularly if such volume is light;
- the trading market of our common stock and our ability to maintain the listing of our common stock on the NASDAQ Capital Market;
- the outcome of our proxy fight and litigation with Richmond;
- the introduction of new products or services, or product or service enhancements by us or our competitors;
- developments with respect to our or our competitors’ intellectual property rights or regulatory approvals or denials;
- announcements of significant acquisitions or other agreements by us or our competitors;
- sales or anticipated sales of our common stock by our insiders (management and directors);
- conditions and trends in our industry;
- changes in our pricing policies or the pricing policies of our competitors;
- changes in the estimation of the future size and growth of our markets; and
- general economic conditions.

In addition, the stock market in general, the NASDAQ Capital Market, and the market for shares of novel technology and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Further, the market prices of bioscience companies have been unusually volatile in the last year, and such volatility may continue for the foreseeable future. These broad market and industry factors may materially harm the market price of our common stock, regardless of our operating performance. In addition, this volatility could adversely affect an investor's ability to sell shares of our common stock, and/or the available price for such shares, at any given time.

Following periods of volatility in the market price of a company's securities, stockholder derivative lawsuits and securities class action litigation are common. Such litigation, if instituted against us or our officers and directors, could result in substantial costs and a diversion of management's attention and resources.

Potential future sales or issuances of our common stock to raise capital, or the perception that such sales could occur, could cause dilution to our current stockholders and the price of our common stock to fall.

We are currently seeking to raise additional capital in order to support our operations and are pursuing various sources of potential funding, including potential future sales of our common stock or other equity securities. Although we may not be successful in obtaining financing through equity sales on terms that are favorable to us, if at all, any such sales that do occur could result in substantial dilution to the interests of existing holders of our common stock. Additionally, the sale of a substantial number of shares of our common stock or other equity securities to any new investors, or the anticipation of such sales, could cause the trading price of our common stock to fall.

We have never paid dividends on our capital stock, and we do not anticipate paying any cash dividends in the foreseeable future.

The continued operation and expansion of our business will require substantial funding. Investors seeking cash dividends in the foreseeable future should not purchase our common stock. We have paid no cash dividends on any of our capital stock to date and we currently intend to retain our available cash to fund the development and growth of our business. Any determination to pay dividends in the future will be at the discretion of our Board and will depend upon results of operations, financial condition, contractual restrictions, restrictions imposed by applicable law and other factors our Board deems relevant. We do not anticipate paying any cash dividends on our common stock in the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock, which may never occur.

Anti-takeover provisions under our charter documents and Delaware law could delay or prevent a change of control and could also limit the market price of our stock.

Certain provisions of our charter and bylaws may delay or frustrate the removal of incumbent directors and may prevent or delay a merger, tender offer, or proxy contest involving us that is not approved by our Board, even if such events may be beneficial to the interests of stockholders. For example, our Board, without stockholder approval, has the authority and power to authorize the issuance of up to 5,000,000 shares of preferred stock and such preferred stock could have voting or conversion rights which could adversely affect the voting power of the holders of our common stock. In addition, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which may discourage, delay or prevent certain business combinations with stockholders owning 15% or more of our outstanding voting stock. These and other provisions in our charter documents may make it more difficult for stockholders or potential acquirers to initiate actions that are opposed by the then-current board of directors, including delaying or impeding a merger, tender offer, or proxy contest or other change of control transaction involving our company. Any delay or prevention of a change of control transaction could cause stockholders to lose a substantial premium over the then-current market price of their shares.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, any prospectus supplement and the documents incorporated by reference herein contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that involve substantial risks and uncertainties. All statements, other than statements of historical fact, including statements regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “will” and “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included and incorporated by reference in this prospectus that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. See “Risk Factors” for more information. You should consider these factors and other cautionary statements made in this prospectus and in the documents we incorporate by reference as being applicable to all related forward-looking statements wherever they appear in the prospectus and in the documents incorporated by reference. Unless specifically indicated, our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures or investments we may make. We do not assume any obligation to update any forward-looking statements.

USE OF PROCEEDS

Unless otherwise provided in the applicable prospectus supplement, we currently intend to use the net proceeds from the sale of the securities under this prospectus for general corporate purposes, which may include the development of our products and services, our repurchase of outstanding stock of the Company, the acquisition of products, technologies or businesses, working capital, capital expenditures and for the repayment of the Bridge Loan discussed earlier in this Prospectus. We may set forth additional information on the use of proceeds from the sale of securities we offer under this prospectus in a prospectus supplement relating to the specific primary offering. We have not determined the amount of net proceeds to be used specifically for the foregoing purposes. As a result, our management will have broad discretion in the allocation of the net proceeds. Pending use of the net proceeds, we intend to invest the proceeds in a variety of capital preservation instruments, which may include investment grade interest bearing instruments of both a short term and long term duration. All investments, if any, will be made in accordance with the Company’s investment policy as approved by the board of directors.

DESCRIPTION OF SECURITIES

The descriptions of the securities contained in this prospectus, together with the applicable prospectus supplements, summarize the material terms and provisions of the various types of securities that we or the selling stockholders may offer. We will describe in the applicable prospectus supplement relating to any securities the particular terms of the securities offered by that prospectus supplement. If we so indicate in the applicable prospectus supplement, the terms of the securities may differ from the terms we have summarized below. We will also include in the prospectus supplemental information, where applicable, about material U.S. federal income tax considerations relating to the securities, and the securities exchange, if any, on which the securities will be listed.

DESCRIPTION OF CAPITAL STOCK

Our authorized capital stock consists of 100,000,000 shares of common stock, \$0.01 par value per share, and 5,000,000 shares of preferred stock, \$0.01 par value per share. As of July 23, 2012 there were 57,702,100 shares of common stock issued and outstanding, and no shares of preferred stock outstanding. The following summary description of our capital stock is based on the provisions of our Certificate of Incorporation and Bylaws and the applicable provisions of the Delaware General Corporation Law, or the "DGCL". This information is qualified entirely by reference to the applicable provisions of our Certificate of Incorporation and Bylaws and the DGCL.

Common Stock

Dividend rights. 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 funds legally available pursuant to the DGCL if our Board of Directors, in its discretion, determines to issue dividends and then only at the times and in the amounts that our Board of Directors may determine.

Voting rights. 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. Our Certificate of Incorporation does not provide for the right of stockholders to cumulate votes for the election of directors. Our Certificate of Incorporation does not establish a classified board of directors and all directors will be elected at each annual meeting of our stockholders.

No preemptive or similar rights. Our common stock is not entitled to preemptive rights and is not subject to conversion, redemption or sinking fund provisions. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of any series of our preferred stock that we may designate and issue in the future.

Right to receive liquidation distributions. Upon our dissolution, liquidation or winding-up, the assets legally available for distribution to our stockholders are distributable ratably among the holders of our common stock, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Fully paid and nonassessable. All of our outstanding shares of common stock are fully paid and nonassessable.

Transfer agent. The transfer agent for our common stock is Computershare Trust Company, N.A. Its address is 350 Indiana Street, Suite 800, Golden, Colorado 90401, and its telephone number is (303) 262-0600.

Exchange Listing. Our common stock is listed on the NASDAQ Capital Market under the symbol "PURE".

Preferred Stock

Our Certificate of Incorporation authorizes our Board of Directors to issue preferred stock from time to time with such designations, preferences, conversion or other rights, voting powers, restrictions, dividends or limitations as to dividends or other distributions, qualifications or terms or conditions of redemption as shall be determined by the Board of Directors for each class or series of stock subject to the provisions of our Certificate of Incorporation. Preferred stock is available for possible future financings or acquisitions and for general corporate purposes without further authorization of stockholders unless such authorization is required by applicable law, the rules of the NASDAQ Capital Market or other securities exchange or market on which our stock is then listed or admitted to trading.

Our Board of Directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes could, under some circumstances, have the effect of delaying, deferring or preventing a change in control of the Company.

A prospectus supplement relating to any series of preferred stock being offered will include specific terms relating to the offering. Such prospectus supplement will include:

- the title and stated or par value of the preferred stock;
- the number of shares of the preferred stock offered, the liquidation preference per share and the offering price of the preferred stock;
- the dividend rate(s), period(s) and/or payment date(s) or method(s) of calculation thereof applicable to the preferred stock;
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whether dividends shall be cumulative or non-cumulative and, if cumulative, the date from which dividends on the preferred stock shall accumulate;

- any voting rights of the preferred stock;
- the provisions for redemption, if applicable, of the preferred stock;
- any listing of the preferred stock on any securities exchange;

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- the terms and conditions, if applicable, upon which the preferred stock will be convertible into our common stock, including the conversion price or the manner of calculating the conversion price and conversion period;
- if appropriate, a discussion of Federal income tax consequences applicable to the preferred stock;
- any other specific terms, preferences, rights, limitations or restrictions of the preferred stock.

The terms, if any, on which the preferred stock may be convertible into or exchangeable for our common stock will also be stated in the preferred stock prospectus supplement. The terms will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option, and may include provisions pursuant to which the number of shares of our common stock to be received by the holders of preferred stock would be subject to adjustment.

Stock Options, Restricted Stock and Warrants

As of July 23, 2012 there were 6,121,490 shares of common stock reserved for issuance under our equity compensation plans or upon exercise of outstanding stock options or warrants. Of that number, 2,737,750 shares were reserved for issuance under equity compensation plans for vested and unvested stock options. We also have 3,383,740 shares reserved for issuance on the exercise of outstanding warrants. The Secured Convertible Notes are also convertible, at the option of the Lenders, into shares of our common stock if the entire balance is not repaid by December 26, 2012 or if there is an event of default; the price for the conversion is \$0.41 per share subject to certain adjustments, which could result in the issuance of 3,254,472 shares of our common stock. If on or before September 24, 2012 we consummate a registered public offering of our securities resulting in gross proceeds to us of at least \$4,000,000 at a price per share that is lower than \$.41 (subject to adjustment for stock splits dividends, distributions, recapitalizations and the like), then the number of shares of common stock subject to the Warrants issued in the Bridge Loan transaction will be increased by using such lower price. The price used shall also be the exercise price of the Warrants.

Certificate of Incorporation and Bylaws

Because our stockholders do not have cumulative voting rights in the election of directors, stockholders holding a majority of the shares of common stock represented in person or by proxy at a duly called stockholder meeting will be able to elect all of our directors. Our Board of Directors will be able to elect a director to fill a vacancy created by the expansion of the Board or due to the resignation or departure of an existing member of the Board. Our Certificate of Incorporation and Bylaws also provide that all stockholder actions must be effected at a duly called meeting of stockholders and not by a consent in writing, and that only the Chairman of the Board, the Chief Executive Officer or the Board of Directors may call a special meeting of stockholders. In addition, our Bylaws include a requirement for the advance notice of nominations for election to our Board of Directors or for proposing matters that can be acted upon at a stockholders' meeting. As described above, our Certificate of Incorporation also provides for the ability of the Board of Directors to issue, without stockholder approval, up to 5,000,000 shares of preferred stock with terms set by the Board of Directors, which rights could be senior to those of our common stock and which terms could be designed to delay or prevent a change in control of the Company or make removal of management more difficult.

The foregoing provisions may make it difficult for our existing stockholders to replace our Board of Directors, as well as for another party to obtain control of the Company by replacing our Board of Directors. In addition, the authorization of undesignated preferred stock makes it possible for the Board of Directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change the Company's control. Further, our Certificate of Incorporation and Bylaws provide that we will indemnify our directors and officers against liabilities, losses and expenses incurred or suffered in investigations and legal proceedings resulting from their services for us, which may include service in connection with takeover defense measures.

Section 203 of the DGCL

We are subject to the provisions of Section 203 of the DGCL regulating corporate takeovers. Under Section 203 of the DGCL, a Delaware corporation is prohibited from engaging in a “business combination” with an “interested stockholder” for three years following the date that such person or entity becomes an interested stockholder. With certain exceptions, an interested stockholder is a person or entity that owns, individually or with or through other persons or entities, fifteen percent (15%) or more of the corporation’s outstanding voting stock (including rights to acquire stock pursuant to an option, warrant, agreement, arrangement or understanding, or upon the exercise of conversion or exchange rights, and also stock as to which the person has voting rights only). The three-year moratorium imposed by Section 203 on business combinations does not apply if:

- Prior to the date on which the interested stockholder becomes an interested stockholder, the board of directors of the corporation approves either the business combination or the transaction that resulted in the person or entity becoming an interested stockholder;
- Upon consummation of the transaction that makes the person or entity an interested stockholder, the interested stockholder owns at least eighty-five percent (85%) of the corporation’s voting stock outstanding at the time the transaction commenced (excluding, for purposes of determining voting stock outstanding, shares owned by directors who are also officers of the corporation and shares held by employee stock plans that do not give employee participants the right to decide confidentially whether to accept a tender or exchange offer); or
- On or after the date the person or entity becomes an interested stockholder, the business combination is approved both by the Board of Directors and by the stockholders at a meeting by sixty-six and two-thirds percent (66 2/3 %) of the outstanding voting stock not owned by the interested stockholder.

A Delaware corporation may “opt out” of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or bylaws resulting from a stockholders’ amendment approved by at least a majority of the outstanding voting shares. We have not “opted out” and do not plan 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.

Effects of Authorized but Unissued Stock

We have shares of common stock and preferred stock available for future issuance without stockholder approval, subject to any limitations imposed by the listing standards of the NASDAQ. We may utilize these additional shares for a variety of corporate purposes including for future public offerings to raise additional capital or facilitate corporate acquisitions or for payment as a dividend on our capital stock. The existence of unissued and unreserved common stock and preferred stock may enable our Board of Directors to issue shares to persons friendly to current management or to issue preferred stock with terms that could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a controlling interest in our company by means of a merger, tender offer, proxy contest or otherwise. In addition, if we issue preferred stock, the issuance could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation.

Limitation of Liability and Indemnification of Officers and Directors

As permitted by the Delaware General Corporation Law, we have adopted provisions in our Certificate of Incorporation and Bylaws that limit or eliminate the personal liability of our directors. Consequently, a director is not personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock repurchases, redemptions or other distributions; or
 - any transaction from which the director derived an improper personal benefit.

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These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our Bylaws provide that:

- we will indemnify our directors, officers, employees and agents to the fullest extent permitted by the DGCL; and
- we will advance expenses, including attorneys' fees, to our officers and directors and, in the discretion of our board of directors, to our employees and agents, in connection with legal proceedings, subject to limited exceptions.

We also maintain general liability insurance that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, or persons controlling the registrant pursuant to the foregoing provisions, we have been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

These provisions may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. We believe that these provisions, the indemnification agreements and the insurance are necessary to attract and retain talented and experienced directors and officers.

DESCRIPTION OF WARRANTS

We may issue warrants, 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 or the manner of determining such price;

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- 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 material 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

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we sell under this prospectus, as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units comprised of one or more shares of common stock, shares of preferred stock and warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units, including:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Capital Stock” and “Description of Warrants” will apply to each unit and to any common stock, preferred stock or warrant included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in numerous distinct series as we determine.

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Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

Title

We, the unit agent and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purposes and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary.

PLAN OF DISTRIBUTION

We are registering securities with an aggregate public offering price not to exceed \$50,000,000, to be sold by the Company under a “shelf” registration process. We may issue shares of our preferred stock, common stock, warrants, or units to purchase preferred stock, common stock, warrants or any combination of these securities, either separately or in units, in one or more offerings. For any such offering under this prospectus we will amend or supplement this prospectus by means of an accompanying prospectus supplement setting forth the specific terms and conditions and other information about that offering as is required or necessary.

We may sell the securities under this prospectus in one or more of the following ways from time to time:

- directly to investors or purchasers;
- to investors through agents;
- directly to agents;
- to or through brokers or dealers;
- to the public through underwriting syndicates led by one or more managing underwriters;
- to one or more underwriters acting alone for resale to investors or to the public;
- through a block trade in which the broker or dealer engaged to handle the block trade will attempt to sell the securities as agent, but may position and resell a portion of the block as principal to facilitate the transaction; or
- through a combination of any of these methods of sale.

The securities that we distribute by any of these methods may be sold, in one or more transactions, at:

- a fixed price or prices, which may be changed;
- market prices prevailing at the time of sale;
- prices related to prevailing market prices;

- negotiated prices; or
- a combination of these pricing methods.

Offers to purchase offered securities may be solicited by agents designated by us from time to time. Any agent involved in the offer or sale of the offered securities in respect of which this prospectus is delivered will be named, and any commissions payable by us will be set forth in the applicable prospectus supplement. Unless otherwise set forth in the applicable prospectus supplement, any agent will be acting on a reasonable best efforts basis for the period of its appointment. Any agent may be deemed to be an underwriter, as that term is defined in the Securities Act, of the offered securities so offered and sold.

We will set forth in a prospectus supplement the terms of the offering of our securities, including:

- the name or names of any agents, underwriters or dealers;
- the purchase price of our securities being offered and the proceeds we will receive from the sale;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any agency fees or underwriting discounts and commissions and other items constituting agents' or underwriters' compensation;
- the public offering price;
- any discounts or concessions allowed or reallocated or paid to dealers; and
- any securities exchanges on which such securities may be listed.

If offered securities are sold to the public by means of an underwritten offering, either through underwriting syndicates represented by managing underwriters or directly by the managing underwriters, we will execute an underwriting agreement with an underwriter or underwriters, and the names of the specific managing underwriter or underwriters, as well as any other underwriters, will be set forth in the applicable prospectus supplement. In addition, the terms of the transaction, including commissions, discounts and any other compensation of the underwriters and dealers, if any, will be set forth in the applicable prospectus supplement, which prospectus supplement will be used by the underwriters to make resales of the offered securities. If underwriters are utilized in the sale of the offered securities, the offered securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including:

- negotiated transactions;
- at fixed public offering prices; or
- at varying prices determined by the underwriters at the time of sale.

In addition, unless otherwise indicated in the prospectus supplement, the underwriting agreement will provide that the obligations of the underwriters are subject to specified conditions precedent and that the underwriters with respect to a sale of offered securities will be obligated to purchase all of the offered securities if any are purchased.

We may grant to the underwriters options to purchase additional offered securities to cover over-allotments, if any, at the public offering price with additional underwriting discounts or commissions, as may be set forth in the applicable prospectus supplement. If we grant any over-allotment option, the terms of the over-allotment option will be set forth in the applicable prospectus supplement.

If a dealer is utilized in the sales of offered securities, we will sell the offered securities to the dealer as principal. The dealer may then resell the offered securities to the public at varying prices to be determined by the dealer at the time of resale. Any dealer may be deemed to be an underwriter of the offered securities so offered and sold. The name of the dealer and the terms of the transaction will be set forth in the applicable prospectus supplement.

We may directly solicit offers to purchase offered securities and sell offered securities directly to institutional investors or others with respect to any resale of the offered securities. The terms of any of these sales will be described in the applicable prospectus supplement.

Offered securities may also be offered and sold in connection with a remarketing upon their purchase, in accordance with a redemption or repayment pursuant to their terms, or otherwise by one or more remarketing firms acting as principals for their own accounts or as agents for us. Any remarketing firm will be identified and the terms of its agreements, if any, with us and its compensation will be described in the applicable prospectus supplement. Remarketing firms may be deemed to be underwriters in connection with the offered securities remarketed by them.

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Agents, underwriters, dealers and remarketing firms may be entitled, under agreements entered into with us, to indemnification by us against specified civil liabilities, including liabilities under the Securities Act that may arise from any untrue statement or alleged untrue statement of a material fact or any omission or alleged omission to state a material fact in this prospectus, any supplement or amendment hereto, or in the registration statement of which this prospectus forms a part, or to contribution with respect to payments which the agents, underwriters or dealers may be required to make.

We may authorize underwriters or other persons acting as our agents to solicit offers by specified institutions to purchase offered securities from us pursuant to contracts providing for payments and delivery on a future date, which will be set forth in the applicable prospectus supplement. Institutions with which these contracts may be made include commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and others. However, in all cases, these institutions must be approved by us. The obligations of any purchaser under any contract will be subject to the condition that the purchase of the offered securities shall not, at the time of delivery, be prohibited under the laws of the jurisdiction to which the purchaser is subject. The underwriters and other agents will not have any responsibility in respect of the validity or performance of these contracts.

Underwriters, dealers, agents and remarketing firms may be customers of, engage in transactions with, or perform services for, us in the ordinary course of business for which they have received or will continue to receive customary compensation.

Unless otherwise specified in the applicable prospectus supplement, each class or series of securities will be a new issue with no established trading market, other than our common stock, which is traded on the NASDAQ. We may elect to list any other class or series of securities on any exchange and, in the case of our common stock, on any additional exchange. However, unless otherwise specified in the applicable prospectus supplement, we will not be obligated to do so. It is possible that one or more underwriters may make a market in a class or series of securities, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We cannot give any assurance as to the liquidity of the trading market for any of the offered securities.

In connection with an offering, an underwriter 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 the offering. "Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional securities from us, if any, in the offering. If the underwriters have an over-allotment option to purchase additional securities from us, the underwriters may close out any covered short position by either exercising their over-allotment option or purchasing securities in the open market. In determining the source of securities to close out the covered short position, the underwriters may consider, among other things, the price of securities available for purchase in the open market as compared to the price at which they may purchase securities through the over-allotment option. "Naked" short sales are any sales in excess of such option or where the underwriters do not have an over-allotment option. The underwriters must close out any naked short position by purchasing securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in the offering.

Accordingly, to cover these short sales positions or to otherwise stabilize or maintain the price of the securities, the underwriters may bid for or purchase securities in the open market and may impose penalty bids. If penalty bids are imposed, selling concessions allowed to syndicate members or other broker-dealers participating in the offering are reclaimed if securities previously distributed in the offering are repurchased, whether in connection with stabilization transactions or otherwise. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. The impositions of a penalty bid may also affect the price of the securities to the extent that it discourages resale of the securities. The magnitude or

effect of any stabilization or other transactions is uncertain. These transactions may be effected on the NASDAQ or otherwise and, if commenced, may be discontinued at any time.

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LEGAL MATTERS

The validity of the securities offered hereby is being passed upon for us by SPECTRUM LAW GROUP, LLP, Irvine, California. Any underwriter, dealer, or agent may be advised about issues relating to any offering by its own legal counsel.

EXPERTS

Our consolidated financial statements as of July 31, 2010 and 2011, and for the years then ended, have been incorporated by reference herein in reliance upon the report of Mayer Hoffman McCann P.C., independent registered public accounting firm, and upon the authority of said firm as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement under the Securities Act that registers the distribution of the securities offered under this prospectus. The registration statement, including the attached exhibits and schedules, contains additional relevant information about us and the securities. The rules and regulations of the SEC allow us to omit from this prospectus certain information included in the registration statement.

In addition, we file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any materials we file with the SEC at the SEC's public reference room located 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.

In addition, the SEC maintains an Internet website at <http://www.sec.gov> that contains the reports, proxy statements and other information that we file with the SEC. We also maintain a website at www.purebio.com, which provides additional information about our company and through which you can also access our SEC filings. The information set forth on our website is not part of this prospectus.

The SEC allows us to "incorporate by reference" into this prospectus the information we have filed with the SEC in other documents. This means we can disclose important information to you by referring to those documents already on file with the SEC that contain the information. The information incorporated by reference is considered to be part of this prospectus. We incorporate by reference into this prospectus the following documents, which we have filed with the SEC pursuant to the Exchange Act:

- Our annual report on Form 10-K for the year ended July 31, 2011, filed with the SEC on October 31, 2011;
- Our quarterly report on Form 10-Q for the quarterly period ended April 30 2012, filed with the SEC on June 13, 2012;
- Our quarterly report on Form 10-Q for the quarterly period ended January 31, 2012, filed with the SEC on March 16, 2012;
- Our quarterly report on Form 10-Q and Form 10-Q/A for the quarterly period ended October 31, 2011, filed with the SEC on December 15, 2011 and December 22, 2011, respectively;
 - Our definitive proxy statement on Schedule 14A filed with the SEC on July 12, 2012; and
- Our current reports on Form 8-K filed with the SEC on December 15, 2011, March 16, 2012, March 28, 2012, April 24, 2012, May 10, 2012, May 21, 2012, June 7, 2012, and June 13, 2012, June 26, 2012; June 29, 2012, July 6, 2012, July 12, 2012, and July 13, 2012.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, including all such documents we may file with the SEC after the date of the initial Registration Statement and prior to the effectiveness of the Registration Statement, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus and deemed to be part of this prospectus from the date of the filing of such reports and documents.

Any statement contained in any document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any prospectus supplement modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

We will provide to each person, including any beneficial owner, to whom a prospectus is delivered, without charge upon written or oral request, a copy of any or all of the reports or documents that are incorporated by reference into this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. If you would like to request documents from us, please send a request in writing or by telephone to us at the following address:

Pure Bioscience, Inc.
1725 Gillespie Way
San Diego, CA 92020
(619)596-8600

You should rely only on the information contained in this prospectus, including information incorporated by reference as described above, any accompanying prospectus supplement or any “free writing prospectus” we may authorize to be delivered to you. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. You should not assume that the information in this prospectus or any prospectus supplement is accurate as of any date other than the date on the front of those documents or that any document incorporated by reference is accurate as of any date other than its filing date. You should not consider this prospectus to be an offer or solicitation relating to the securities in any jurisdiction in which such an offer or solicitation relating to the securities is not authorized. Furthermore, you should not consider this prospectus to be an offer or solicitation relating to the securities if the person making the offer or solicitation is not qualified to do so, or if it is unlawful for you to receive such an offer or solicitation.

\$_____ of Common Stock

PROSPECTUS SUPPLEMENT

Aegis Capital Corp

September __, 2012