

PURE BIOSCIENCE, INC.

Form S-3

June 29, 2012

As filed with the Securities and Exchange Commission on June 29, 2012

Registration No. 333-

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

FORM S-3
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

PURE BIOSCIENCE, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of Incorporation or
Organization)

33-0530289
(I.R.S. Employer Identification No.)

PURE Bioscience, Inc.
1725 Gillespie Way
El Cajon, CA 92020
(619) 596-8600

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Michael L. Krall
President and Chief Executive Officer
1725 Gillespie Way
El Cajon, CA 92020
(619) 596-8600

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:
Keith A. Rosenbaum
SPECTRUM LAW GROUP, LLP
1900 Main Street
Suite 300
Irvine, CA 92614

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment

plans, please check the following box.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

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

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

If this form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. "

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. "

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)(2)	Proposed Maximum Offering Price per Share (1)(2)	Proposed Maximum Aggregate Offering Price (1)(3)	Amount of Registration Fee
Preferred Stock, \$0.01 par value per share				
Common Stock, \$0.01 par value per share				\$ 5,730
Warrants				
Units				
Total			\$ 50,000,000	\$ 5,730

- (1) Such indeterminate amount or number of shares of preferred stock, shares of common stock, warrants, or units to purchase any combination of the foregoing securities, as may from time to time be issued at indeterminate prices, with an aggregate initial offering price not to exceed \$50,000,000. Securities registered hereunder may be sold separately, together or as units with other securities registered hereunder. The securities also include such indeterminate number of shares of preferred stock, shares of common stock, warrants, or units as may be issued upon conversion or exchange for preferred stock, upon exercise of warrants or pursuant to the anti-dilution provisions of any such securities.
- (2) Such information is not required to be included pursuant to General Instruction II.D of Form S-3 under the Securities Act of 1933, as amended, or the Securities Act.
- (3) The proposed maximum aggregate price has been estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act.

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The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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

SUBJECT TO COMPLETION, DATED JUNE 29, 2012

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 June 28, 2012, the last reported sale price of the shares of our common stock on the NASDAQ Capital Market was \$0.41 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. The San Diego County Superior Court has since ordered that we participate in mediation with both Richmont entities to attempt to resolve the dispute, which must commence no later than August 30, 2012. If such mediation is not successful and the dispute continues to trial, the court has established November 26, 2012 as the date for the commencement of the trial. We intend to vigorously pursue our claims and defend against the cross-claims.

Richmont Corporation Proxy Fight

We have received a notice from Richmont 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 Richmont 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.

If Richmont engages in an aggressive proxy contest, which now appears likely, our business could be adversely affected. Responding to proxy contests and other actions by insurgent stockholders can be costly and time-consuming, disrupting operations and diverting the attention of management and employees. Perceived uncertainties as to our future direction may impact our existing and potential collaborations or strategic relationships and may make it more difficult to attract and retain qualified personnel. 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.

Executive Officer Employment Agreements

We have executed employment agreements with two of our executive officers, Michael L. Krall, our President and Chief Executive Officer; and, Donna Singer, our Executive Vice President. The agreement with each respective executive provides for compensation if the executive's employment is terminated by us without Cause within 12 months following a Change in Control, or the executive resigns for Good Reason within such period. A "Change in Control" is the closing of the sale, transfer or other disposition of all or substantially all of the our assets or the exclusive license of substantially all of our intellectual property; the consummation of a merger or consolidation of the Company with or into another entity; the closing of the acquisition of beneficial ownership of 30% or more of our outstanding voting stock; or if individuals who, on the effective date of the agreement are members of the Board, or are nominees of such Board members, cease to constitute at least a majority of the members of the Board. Should Richmont be successful in its proxy fight a "Change in Control" under the employment agreement with Mr. Krall and Ms. Singer, respectively, would be deemed to have occurred.

Upon such event, the executive would be entitled to additional severance pay in excess of the amounts described above, in each case in an amount equal to a single lump sum payment equal to 100% of the applicable executive's then current annual base salary, plus the average annual bonus awarded to the executive for the preceding two fiscal years. In addition, in such event, the vesting of all outstanding stock options then held by the applicable executive would automatically accelerate and all stock options would continue to be exercisable for 12 months, but in no event beyond the maximum permitted expiration date.

If Mr. Krall had been terminated on July 31, 2011 without Cause or had terminated his employment for Good Reason on such date, he would have received a lump sum payment of \$577,500 and the continued participation in our group health insurance benefits on the same terms as during his employment until 18 months following his termination, at a cost to us of \$8,534. Additionally, if Mr. Krall was terminated without Cause or resigned for Good Reason within 12 months following a Change in Control, he would have received the same benefits plus (i) an additional lump sum payment of \$385,000, (ii) a bonus payment of \$48,750, and (iii) the accelerated vesting of his unvested stock options with an aggregate intrinsic value of zero based on the closing price of our common stock on July 31, 2011.

If Ms. Singer had been terminated on July 31, 2011 without Cause or had terminated her employment for Good Reason on such date, she would have received a lump sum payment of \$220,000 and the continued participation in our

group health insurance benefits on the same terms as during her employment until 12 months following her termination, at a cost to us of \$14,324. Additionally, if Ms. Singer was terminated without Cause or resigned for Good Reason within 12 months following a Change in Control, she would have received the same benefits plus (i) an additional lump sum payment of \$220,000, (ii) a bonus payment of \$22,750, and (iii) the accelerated vesting of her unvested stock options with an aggregate intrinsic value of zero based on the closing price of our common stock on July 31, 2011.

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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 is 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 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

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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.

Bridge Loan Transaction

On June 26, 2012 we entered into an agreement under which we can borrow a maximum principal amount of \$1,333,333 in a transaction we refer to as the "Bridge Loan". Under the terms of the Bridge Loan we will issue our Secured Promissory Notes in favor of the Lenders. The proceeds of the Bridge Loan will be used for general corporate purposes. We expect to close the Bridge Loan as soon as possible.

The Secured Promissory Notes have an interest rate of -0-% so long as we repay the principal balance on or before December 26, 2012; there is a one-time interest charge of 10% if we fail to repay the entire balance of the Secured Promissory Notes by December 26, 2012. The Secured Promissory Notes are secured by a lien on all of our assets pursuant to a Security Agreement. The Secured Promissory 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; the price for the conversion is \$0.41 per share subject to certain adjustments, which could result in the issuance of 3,577,235 shares of our common stock.

As additional consideration for the Bridge Loan, we also provided or issued, as appropriate, to each of the Lenders: (i) that number of shares of our common stock equal to 15% of the amount loaned by each Lender (resulting in the issuance of a maximum of 487,805 shares of our common stock to the Lenders); (ii) a 10% original issue discount on the Secured Promissory Notes so that each Lender will remit to us 90% of the amount of their respective Secured Promissory Note; (iii) warrants to acquire that number of shares of our common stock equal to the amount loaned by 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 466,667 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 Promissory 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.

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 and continue to develop new products and technologies, 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;
- our prevailing in our litigation and proxy fight with Richmond;
- 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. 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 will have incurred substantial indebtedness as a result of the closing of the Bridge Loan discussed earlier in this registration statement. We will 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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We are currently involved in litigation, and such existing litigation, other litigation or the actions of regulatory authorities may harm our business or otherwise distract our management.

Substantial, complex or extended litigation could cause us to incur major expenditures and would distract our management. We are currently involved in litigation with Richmond Sciences, LLC and Richmond Holdings, LLC. On June 29, 2011, we filed suit against Richmond Sciences, LLC asserting various causes of action to collect on an outstanding invoice. Richmond Sciences, LLC and Richmond 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 Richmond entities asserting contract and fraud claims. The San Diego County Superior Court has since ordered that we participate in mediation with both Richmond entities to attempt to resolve the dispute, which must commence no later than August 30, 2012. If such mediation is not successful and the dispute continues to trial, the court has established November 26, 2012 as the date for the commencement of the trial. We intend to vigorously pursue our claims and defend against the cross-claims of the Richmond entities, which may divert management's attention and consequently have a negative impact on our business.

Other 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.

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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 June 28, 2012, in addition to 54,657,074 shares of common stock issued and outstanding, we currently have 4,913,517 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 2,175,767 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.

As part of our Bridge Loan transaction, we issued warrants to our lenders to acquire a maximum of 466,667 shares of our common stock. The Secured Promissory 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; the price for the conversion is \$0.41 per share subject to certain adjustments, which could result in the issuance of 3,577,235 shares of our common stock. The exercise of options and warrants, and the sale of shares underlying such options or warrants, could have an adverse effect on the market for our common stock, including the price that an investor could obtain for their shares. Investors may experience dilution in the net tangible book value of their investment upon the exercise of outstanding options and warrants granted under our stock option plans, and options and warrants that may be granted or issued in the future. We also issued 4,600,000 shares of our common stock as additional collateral for the timely repayment of the Bridge Loan. All of those shares could be issued to the lenders of the Bridge Loan in the event we fail to timely repay the Bridge Loan.

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

We have received a notice from Richmond Corporation, or Richmond, and such notice, the Richmond Notice, announcing its intended nomination of six individuals for election to our Board of Directors at our 2012 annual meeting. In the Richmond Notice, Richmond confirmed its ownership of shares of our common stock, which shares represent less than one half of one percent of our outstanding common stock. Since our receipt of the Richmond Notice: on December 23, 2011, Richmond filed a preliminary proxy statement with 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 Richmond's proxy contest is successful; on February 17, 2012, we announced the date of our 2012 annual meeting of stockholders as July 25, 2012; on February 27, 2012, Richmond 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; and, Richmond filed its preliminary revised contested proxy statement on June 27, 2012. Further, on June 22, 2012 Richmond delivered to us a written demand to inspect certain books and records of ours in connection with the proxy fight and pursuant to provisions of Delaware General Corporation Law. If a proxy contest results from these actions by Richmond, 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.

As stated above, Richmond has identified as part of its intended agenda the termination of our ongoing litigation with Richmond Sciences, LLC and the entry into a new, unspecified relationship with Richmond Sciences, LLC. We believe implementation of Richmond's stated agenda would materially and adversely affect our business and our future prospects in the event that Richmond is successful in its proxy contest.

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;

- 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.

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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 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 is 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 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. 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 June 28, 2012, the closing market price of our common stock ranged from \$0.24 per share to \$1.14 per share, and the monthly trading volume varied from approximately 1.8 million shares to 5.1 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 June 28 2012 there were 54,657,074 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.

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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;
-

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;

- 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 June 28, 2012 there were 4,913,517 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 2,175,767 shares reserved for issuance on the exercise of outstanding warrants. As part of our Bridge Loan transaction, we issued warrants to our lenders to acquire 466,667 shares of our common stock, subject to certain adjustments. The Secured Promissory 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; the price for the conversion is \$0.41 per share subject to certain adjustments, which could result in the issuance of 3,577,235 shares of our common stock.

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.

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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 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 and June 29, 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.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the various expenses to be incurred in connection with the registration of the securities being registered hereby, all of which will be borne by the Registrant. All amounts shown are estimates except the SEC registration fee.

SEC registration fee	\$ 5,730
Transfer agent's, trustee's and depository's fees and expenses	2,000
Printing and engraving expenses	2,500
Legal fees of Registrant's counsel	25,000
Accounting fees and expenses	14,500
Miscellaneous	5,270
Total expenses	\$55,000

Item 15. Indemnification of Directors and Officers.

Section 102 of the DGCL permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The Registrant's restated certificate of incorporation provides that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as director, notwithstanding any provision of law imposing such liability, except to the extent that the Delaware General Corporation Law prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee, or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnify for such expenses which the Court of Chancery or such other court shall deem proper.

The Registrant's Bylaws provide that the Registrant shall indemnify, to the fullest extent permitted by the DGCL and applicable law, as may be amended, any person who was or is a party or is threatened to be made a party to or is otherwise involved in any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she, or a person for whom he or she is the legal representative, is or was one of the Registrant's directors, officers, employees or agents or is or was serving at the Registrant's request as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against all expenses, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties, and amounts paid or to be paid in settlement, and any interest, assessments, or other charges imposed thereon, and any federal, state, local, or foreign taxes imposed as a result of the actual or deemed receipt of any indemnification payments made to such person by the Registrant) reasonably incurred or suffered by such person.

The Registrant maintains a general liability insurance policy which covers certain liabilities of directors and officers of the Registrant arising out of claims based on acts or omissions in their capacities as directors or officers.

Item 16. Exhibits.

The exhibits to this Registration Statement are listed in the exhibit index, which appears elsewhere herein and is incorporated herein by reference.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the SEC pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement.
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement; Provided, however, that paragraphs (1)(i), (1)(ii) and (1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the Registration Statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the Registration Statement.
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

A. Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the Registration Statement as of the date the filed prospectus was deemed part of and included in the Registration Statement; and

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B. Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a Registration Statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the Registration Statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the Registration Statement relating to the securities in the Registration Statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a Registration Statement or prospectus that is part of the Registration Statement or made in a document incorporated or deemed incorporated by reference into the Registration Statement or prospectus that is part of the Registration Statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the Registration Statement or prospectus that was part of the Registration Statement or made in any such document immediately prior to such effective date;

(5) That, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned Registrant pursuant to this Registration Statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned Registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any “free writing prospectus” relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;
- (iii) The portion of any other “free writing prospectus” relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned Registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned Registrant to the purchaser.

(6) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the Registrant’s annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan’s annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new Registration Statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act

of 1933 and will be governed by the final adjudication of such issue.

(8) The undersigned Registrant hereby undertakes to deliver or cause to be delivered with the prospectus, to each person to whom the prospectus is sent or given, the latest annual report to security holders that is incorporated by reference in the prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Securities Exchange Act of 1934; and, where interim financial information required to be presented by Article 3 of Regulation S-X is not set forth in the prospectus, to deliver, or cause to be delivered to each person to whom the prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the prospectus to provide such interim financial information.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of El Cajon, State of California, on June 29 2012.

PURE BIOSCIENCE, INC.

By: /s/ Michael L. Krall
MICHAEL L. KRALL,
President / Chief Executive Officer /
Interim Chief
Financial Officer / Chairman /
Director

SIGNATURES AND POWER OF ATTORNEY

We, the undersigned officers and directors Pure Bioscience, Inc., hereby severally constitute and appoint Michael L. Krall as our true and lawful attorney with full power to sign for us and in our names in the capacities indicated below the Registration Statement on Form S-3 filed herewith and any and all pre-effective and post-effective amendments to said Registration Statement and any subsequent Registration Statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same with all exhibits thereto, and the other documents in connection therewith, with the Securities and Exchange Commission, and generally to do all such things in our name and behalf in our capacities as officers and directors to enable Pure Bioscience, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said Registration Statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Michael L. Krall Michael L. Krall	President, Chief Executive Officer, Interim Chief Financial Officer, Chairman and Director (Principal Executive Officer; Principal Accounting and Financial Officer)	June 29, 2012
/s/ Gregory H. Barnhill Gregory H. Barnhill	Director	June 29, 2012
/s/ Dennis Brovarone Dennis Brovarone	Director	June 29, 2012
/s/ John J. Carbone John J. Carbone	Director	June 29, 2012
/s/ Paul V. Maier Paul V. Maier	Director	June 29, 2012
/s/ Donna Singer Donna Singer	Director	June 29, 2012

EXHIBIT INDEX

The exhibits listed on the Index to Exhibits of this Registration Statement are filed herewith or are incorporated herein by reference to other filings.

- 2.1 Agreement and Plan of Merger, dated as of March 24, 2011, by and between Pure Bioscience and Pure Bioscience, Inc. (incorporated by reference from Exhibit 2.1 to Form 8-K filed with the Commission on March 25, 2011).
- 3.1 Certificate of Incorporation of the Company (incorporated by reference from Exhibit 3.1 to Form 8-K filed with the Commission on March 25, 2011).
- 3.2 Bylaws of the Company (incorporated by reference from Exhibit 3.2 to Form 8-K filed with the Commission on March 25, 2011).
- 4.1 Form of Preferred Stock Certificate*
- 4.2 Form of Warrant Agreement*
- 4.3 Form of Unit Agreement*
- 5.1 Opinion of Spectrum Law Group, LLP
- 10.1 Form of Placement Agency Agreement*
- 23.1 Consent of Mayer Hoffman McCann P.C.
- 23.2 Consent of Spectrum Law Group, LLP (contained in Exhibit 5.1)
- 24.1 Powers of Attorney (included in the signature pages to this registration statement)

(*)To be filed, if necessary, subsequent to the effectiveness of this registration statement by an amendment to this registration statement or incorporated by reference to a Current Report on Form 8-K in connection with an offering of securities.