BIODELIVERY SCIENCES INTERNATIONAL INC
Form 424B5
February 10, 2014
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Prospectus Supplement
(to prospectus dated December 18, 2013)

Filed Pursuant to Rule 424(b)(5)
Registration No. 333-192618

7,500,000 Shares of Common Stock

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering an aggregate of 7,500,000 shares of our common stock directly to institutional investors pursuant to a Securities Purchase Agreement, dated February 7, 2014, at a price per share of $8.00.

Shares of our common stock are currently traded on the Nasdaq Capital Market under the symbol BDSI. On February 7, 2014, the closing sale price of our common stock was $8.26 per share.

The net proceeds to us from this offering will be approximately $58 million. We expect to deliver the shares to the purchasers on or about February 12, 2014.

Investing in our securities involves a high degree of risk. You should purchase our securities only if you can afford a complete loss of your investment. See Risk Factors beginning on page S-10 of this prospectus supplement.

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

The date of this prospectus supplement is February 7, 2014

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Prospectus Supplement

Prospectus

You should rely only on the information contained in this prospectus supplement and the accompanying prospectus or incorporated by reference herein. We have not authorized anyone else to provide you with additional or different information. We are offering to sell, and seeking offers to buy, common stock only in jurisdictions where offers and sales are permitted. You should not assume that the information in this prospectus supplement or the accompanying prospectus 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.

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ABOUT THIS PROSPECTUS SUPPLEMENT

On November 29, 2013, we filed with the SEC a registration statement on Form S-3 (File No. 333-192618), which was subsequently amended by Amendment No.1 to Form S-3, filed December 13, 2013, utilizing a shelf registration process relating to the securities described in this prospectus supplement, which registration statement was declared effective on December 18, 2013. Under this shelf registration process, we may, from time to time, sell up to $75 million in the aggregate of common stock, preferred stock, debt securities, warrants and rights to purchase securities and units, of which approximately all of such $60 million will be sold in this offering.

This document is in two parts. The first part is this prospectus supplement, which describes the specific terms of this common stock offering and also adds to, updates or changes information contained in the accompanying prospectus and the documents incorporated by reference into the prospectus. The second part, the accompanying prospectus, gives more general information, some of which does not apply to this offering. You should read this entire prospectus supplement as well as the accompanying prospectus and the documents incorporated by reference that are described under Where You Can Find More Information in this prospectus supplement and the accompanying prospectus.

If information in this prospectus supplement is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement. Any statement contained in a document incorporated by reference, or deemed to be incorporated by reference, into this prospectus supplement or the accompanying prospectus will be deemed to be modified or superseded for purposes of this prospectus supplement or the accompanying prospectus to the extent that a statement contained herein, therein or in any other subsequently filed document which also is incorporated by reference in this prospectus supplement or the accompanying prospectus modifies or supersedes that statement. Any such statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement or the accompanying prospectus.

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

Unless otherwise stated, all references to us, our, BioDelivery, we, the Company and similar designations refer t
BioDelivery Sciences International, Inc. Our logo, trademarks and service marks are the property of BioDelivery Sciences International, Inc. Other trademarks or service marks appearing in this prospectus are the property of their respective holders.

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PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights selected information about us, this offering and selected information appearing elsewhere in this prospectus supplement, the accompanying prospectus and in the documents we incorporate by reference herein. This summary is not complete and does not contain all of the information that you should consider before deciding whether to invest in our common stock. For a more complete understanding of our company and this offering, we encourage you to read and consider carefully the more detailed information in this prospectus supplement, including the information incorporated by reference into this prospectus supplement and the information referred to under the heading Risk Factors in this prospectus supplement on page SA-10 and in the documents incorporated by reference into this prospectus supplement.

Overview

We are a specialty pharmaceutical company that is developing and commercializing, either on our own or in partnerships with third parties, new applications of proven therapeutics to address important unmet medical needs using both proven and new drug delivery technologies. We have developed and are continuing to develop pharmaceutical products aimed principally in the areas of pain management and addiction.

In formulating our products and product candidates, we utilize the novel, patent protected and proprietary BioErodible MucoAdhesive (known as BEMA®) drug delivery technology, a small, erodible polymer film for application to the buccal mucosa (the lining inside the cheek). Our first U.S. Food and Drug Administration (which we refer to as the FDA) approved product, ONSOLIS® (fentanyl buccal soluble film), as well as two of our product candidates, utilize our BEMA® technology.

In addition to our FDA-approved product ONSOLIS®, our lead products in development are:

BEMA® Buprenorphine, a potential treatment for moderate to severe chronic pain, for which we recently announced positive top-line results from our Phase 3 trial in opioid-naïve subjects. A second Phase 3 clinical study of BEMA® Buprenorphine in opioid experienced subjects is ongoing. BEMA® Buprenorphine which is partnered on a worldwide basis to Endo Pharmaceuticals, Inc. (which we refer to herein as Endo);

BUNAVAIL (formerly known as BEMA® Buprenorphine/Naloxone, or BNX), a high dose formulation of buprenorphine along with an abuse deterrent agent naloxone, which is a potential treatment for opioid dependence, for which we filed a New Drug Application (or NDA) with the FDA in late July 2013 and which NDA was accepted by the FDA on October 9, 2013 and based on timelines established by the Prescription Drug User Fee Act (PDUFA), the review of the BUNAVAIL NDA is expected to be completed by early June 2014; and

Clonidine Topical Gel, a topical administration of the approved product clonidine for the potential treatment of painful diabetic neuropathy and other indications. On December 2, 2013, we announced that we engaged in a positive meeting with the FDA regarding the clinical development program, which will allow the program to proceed to Phase 3 clinical studies, the first of which will begin patient enrollment in late first quarter 2014.

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ONSOLIS ® and our product candidates such as BEMA® Buprenorphine, BUNAVAIL and Clonidine Topical Gel may also have broader indications. When presented with viable commercial opportunities for broader indications of our products, we will consider developing the product for those uses. We also continue to explore the use of the BEMA® technology with additional pharmaceutical products that may fulfill an unmet medical need.

We have worked with other delivery technologies in the past, and as part of our corporate growth strategy, we may seek to acquire or license additional drug delivery technologies or other development stage products in novel technologies. Should we gain access to such technologies, we would seek to formulate these technologies with proven, FDA approved therapeutics and utilize our development and commercialization experience to, either by ourselves or through commercial partnerships, navigate the resulting products through the regulatory review process and ultimately bring them to the marketplace. We plan to follow the same strategy should we acquire or license other development stage products in novel technologies.

Our current development strategy focuses primarily on our ability to utilize the FDA s 505(b)(2) regulatory process to obtain more timely and efficient approval of new formulations of previously approved, active therapeutics incorporated into our drug delivery technologies. Because the 505(b)(2) approval process is designed to address new formulations of previously approved drugs, we believe it has the potential to be more cost efficient and expeditious, and have less regulatory approval risk, than other FDA approval approaches.

Our Lead Product Candidates and Our Marketed Product

We are currently focusing most of our efforts on advancing our three lead product candidates, BEMA® Buprenorphine, BUNAVAIL, and Clonidine Topical Gel and supporting our commercial partner on our FDA, Health Canada and EMEA approved product, ONSOLIS®, which is marketed in Europe under the trade-name BREAKYL.

BEMA® Buprenorphine

BEMA® Buprenorphine is a partial mu-opioid agonist and a potential treatment for moderate to severe chronic pain. In January 2012, we announced the signing of a worldwide licensing and development agreement for BEMA® Buprenorphine (which we refer to herein as the Endo Agreement) with Endo under which we granted to Endo the exclusive, worldwide rights to develop and commercialize BEMA® Buprenorphine for the treatment of chronic pain. The financial terms of the Endo Agreement include: (i) a $30 million upfront license fee, which we received in January 2012; (ii) $95 million in potential milestone payments based on achievement of pre-defined intellectual property, clinical development and regulatory events (some of which we received in 2012); (iii) $55 million in potential sales threshold payments upon achievement of designated sales levels; and (iv) a tiered, mid- to upper-teen royalty on net sales of BEMA® Buprenorphine in the United States and a mid- to high-single digit royalty on net sales of BEMA® Buprenorphine outside the United States.

One of the key intellectual property milestones under our Endo Agreement was achieved in February 2012, when the U.S. Patent and Trademark Office (or USPTO) issued a Notice of Allowance regarding one of our patent applications (No. 13/184306) which, once the patent was granted in April 2012, will extend the exclusivity of the BEMA® drug delivery technology for BEMA® Buprenorphine (as well as BUNAVAIL, as discussed below) from 2020 to 2027. As a result, we received a milestone payment in the amount of $15 million in May 2012, and also related to the issuance of the patent, will receive an additional milestone payment of $20 million at the time of approval of a New Drug Application (or NDA) by the FDA for BEMA® Buprenorphine for the treatment of chronic pain. Such amounts are included in the aforementioned $95 million in potential milestone payments based on intellectual property and clinical development and regulatory events.

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In August 2012, we initiated the first of two Phase 3 pivotal studies for BEMA® Buprenorphine for the treatment of moderate to severe chronic pain in conjunction with our partner Endo. The first study (which recently achieved its primary endpoint as described below) was conducted in patients who are naïve to opioid therapy. The study was a double-blind,

placebo-controlled, randomized enriched enrollment withdrawal trial, which assesses the efficacy and safety of BEMA® Buprenorphine in opioid naïve subjects with moderate to severe chronic low back pain requiring around the clock opioid analgesia. The primary endpoint for this study was the change from baseline to week 12 in the mean average daily pain intensity scores (using an 11-point scale) at twelve weeks compared to placebo.

A second Phase 3 pivotal study is also a double-blind, placebo-controlled, randomized enriched enrollment withdrawal study. However, the trial is assessing the safety and efficacy of BEMA® Buprenorphine in opioid experienced patients already receiving chronic opioid treatment.

Both studies were designed based on findings from our prior Phase 3 clinical study for BEMA® Buprenorphine (which, as we announced in September 2011, did not meet its primary endpoint) by separating the patient populations while making adjustments to the study criteria, starting dose and sample size. We believe these modifications have resulted in two studies with an improved likelihood of achieving their endpoints. In September 2013, we, together with Endo, announced the completion of an interim analysis of both the opioid naïve and opioid experienced Phase 3 trials for BEMA® Buprenorphine. As a result of the interim analyses, it was determined that no sample size adjustment will be necessary to the opioid naïve study. Additional patients were added to the ongoing opioid experienced trial to maintain appropriate power to allow for the detection of a statistically significant difference between BEMA® Buprenorphine and placebo based on the primary efficacy endpoint.

On January 23, 2014, we announced positive top-line results from our pivotal Phase 3 efficacy study of BEMA buprenorphine in opioid- naive subjects. The trial successfully met its primary efficacy endpoint in demonstrating that BEMA buprenorphine resulted in significantly ($p<0.005$) improved chronic pain relief compared to placebo. Additional secondary endpoints were supportive of the efficacy of BEMA Buprenorphine compared to placebo. The most commonly reported adverse events in patients treated with buprenorphine compared to placebo were nausea (10% vs. 8%), vomiting (4% vs. 2%) and constipation (4% vs. 2%). The locking of the database for the opioid naïve study triggered a $10 million milestone payment from Endo per the terms of the licensing agreement.

The second Phase 3 clinical study of BEMA Buprenorphine in an opioid experienced patient group remains ongoing. Based on recruitment rates in this study, the database for this trial is anticipated to be locked by mid-2014 and will be followed shortly thereafter by topline results.

BUNAVAIL

We believe that the widespread use of buprenorphine for the treatment of opioid dependence presents an additional commercial opportunity for the product, and we are developing a formulation of buprenorphine in our BEMA® technology specifically for the treatment of opioid dependence. The product will combine a high dose of buprenorphine along with an abuse deterrent agent, naloxone. We believe that this product, to be marketed as BUNAVAIL in the U.S., provides us with a potential opportunity to compete in a rapidly growing opioid dependence market which, according to Wolters Kluwer, which exceeded $1.7 billion in annual sales in the U.S. in 2013.

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Pharmacokinetic studies have demonstrated the ability of the BEMA® technology to deliver the high doses of buprenorphine necessary for the treatment of opioid dependence. Following completion of studies assessing the pharmacokinetics of BUNAVAIL, a meeting was held with FDA in early February 2012, and following the meeting, we announced that we had reached an agreement with the FDA on the development plan for BUNAVAIL, which includes a pivotal pharmacokinetic study comparing BUNAVAIL to Suboxone® in normal volunteers and a supporting safety study in opioid dependent patients.

In September 2012, we announced the positive outcome of the pivotal pharmacokinetic study comparing BUNAVAIL to Suboxone®. The study was designed to compare the relative bioavailability of buprenorphine and naloxone between BUNAVAIL and the reference product, Suboxone®. The results demonstrated that the two key pharmacokinetic parameters, maximum drug plasma concentration (Cmax) and total drug exposure (AUC), for buprenorphine were comparable to Suboxone®, and that the same parameters for naloxone were similar or less than Suboxone®. This was followed by initiation of the safety study requested by FDA, assessing the safety and tolerability of BUNAVAIL in patients converted from a stable dose of Suboxone® (buprenorphine/naloxone) sublingual tablets or films. A total of 249 patients were enrolled in the study (191 patients completed) which completed in December 2012.

We submitted an NDA for BUNAVAIL in late July 2013. I n October 2013, the FDA accepted for filing our NDA for BUNAVAIL indicating that the application is sufficiently complete to permit a substantive review. Based on timelines established by the Prescription Drug User Fee Act (PDUFA), the review of the BUNAVAIL NDA is expected to be completed by early June 2014.

We currently retain all rights to develop and commercialize BUNAVAIL, and we are presently determining the optimal commercialization strategy for BUNAVAIL. Such strategies could include: (i) partnering (as we did with ONSOLIS® and BEMA® Buprenorphine), (ii) commercializing on our own (which would require us to develop or contract capabilities such as a sales force and manufacturing capability) or (iii) co-promotion, where we would use another company s sales force to promote the product along side of our own sales force, which we would first need to develop.

ONSOLIS

On July 16, 2009, we announced the U.S. approval of ONSOLIS®, a transmucosal formulation of the narcotic fentanyl utilizing our BEMA® technology. ONSOLIS® is indicated for the treatment of breakthrough pain (i.e., pain that breaks through the effects of other medications being used to control persistent pain) in opioid tolerant patients with cancer. In May 2010, regulatory approval was granted for Canada, and in October 2010, approval was obtained in the European Union through the E.U. s Decentralized Procedure, with Germany acting as the reference member state. In the E.U., ONSOLIS® will be marketed under the trade-name BREAKYL. ONSOLIS® was commercially launched in Canada in 2011 and in the E.U. in October 2012. However, as a result of certain appearance and related formulation issues as described further below, manufacturing and distribution of ONSOLIS® were suspended in March 2012 in the U.S and Canada.

Our commercial partner for ONSOLIS® is Meda a leading international specialty pharmaceutical company based in Sweden (which we refer to as Meda). In addition to milestone payments we received and may in the future receive from Meda, we began receiving royalties from Meda on net sales of ONSOLIS® following the product s commercial launch in the U.S. and Canada. Under the terms of its E.U. agreement with Meda, we received a final milestone payment in October 2012 of $2.5 million. We will also receive a royalty on net sales of BREAKYL in the E.U.

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We have granted commercialization and distribution rights for ONSOLIS® on a worldwide basis (except in South Korea and Taiwan) to Meda. Meda s U.S. subsidiary, Meda Pharmaceuticals, based in Somerset, New Jersey, is a specialty pharmaceutical company that develops, markets and sells branded prescription therapeutics. Meda has secured access to additional markets through acquisition of European businesses from Valeant Pharmaceuticals International, Inc. (which we refer to as Valeant) and a joint venture with Valeant covering Australia, Mexico and Canada.

In 2010, we secured commercialization rights for ONSOLIS® for the remaining worldwide territories through execution of licensing agreements with Kunwha Pharmaceutical Ltd. for South Korea and TTY Biopharm Ltd. for Taiwan.

Although we have generated licensing-related and other revenue to date, we only began to generate revenue from the commercial sales of an approved product (ONSOLIS®) in late 2009 and such revenue has been minimal to date due to multiple factors, including a highly restrictive Risk Evaluation and Mitigation Strategy (REMS) imposed by the FDA upon our launch and the suspension of manufacturing and distribution in the U.S and Canada secondary to certain appearance and related formulation issues. The lack of approved REMS programs for our direct competitors had resulted in an unlevel playing field, which created an unfavorable selling environment for ONSOLIS®. Furthermore, increasing pressure from payers and the availability of generic competitors have further impacted the market.

On December 29, 2011, the FDA approved a class-wide REMS program covering all transmucosal fentanyl products under a single risk management program. The program, which is referred to as the Transmucosal Immediate Release Fentanyl (TIRF) REMS Access Program, was designed to ensure informed risk-benefit decisions before initiating treatment with a transmucosal fentanyl product, and while patients are on treatment, to ensure appropriate use. The approved program covers all marketed transmucosal fentanyl products under a single program which will enhance patient safety while limiting the potential administrative burden on prescribers and their patients. One common program also ends the disparity in prescribing requirements for ONSOLIS® compared to similar products and provides ONSOLIS® with both retail and inpatient facility access. It is anticipated that ONSOLIS® will be in a better position to compete on its own merits as a result of the TIRF.

On March 12, 2012, we announced the postponement of the U.S. re-launch of ONSOLIS® following the initiation of the class-wide REMS until the product formulation could be modified to address two appearance issues raised by FDA during an inspection of the manufacturing facility of our North American manufacturing partner for ONSOLIS®, Aveva Drug Delivery Systems, Inc. (which we refer to herein as Aveva). Specifically, the FDA identified the formation of microscopic crystals and fading of the color in the mucoadhesive layer during the product s 24-month shelf life. While these changes do not affect the product s underlying integrity, performance, the FDA believes that the fading of the color in particular may potentially confuse patients, necessitating a modification of the product before additional product can be manufactured and distributed. Therefore, the U.S. re-launch and additional manufacturing of ONSOLIS® was postponed until such product appearance issues have been resolved. The source of microcrystal formation and the potential for fading of the product was found to be specific to a buffer used in the manufacturing process for ONSOLIS®. ONSOLIS® has been reformulated and data has been submitted to the FDA for review. Assuming a favorable response from FDA, manufacturing will be reinitiated and ONSOLIS® could be re-launched in the U.S. during the second half of 2014.

Clonidine Topical Gel

On March 26, 2013, we entered into a definitive Exclusive License Agreement (which we refer to as the Arcion Agreement) with Arcion Therapeutics, Inc., a Delaware corporation (which we refer to as

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Arcion), pursuant to which Arcion agreed to grant to us an exclusive commercial world-wide license, with rights of sublicense, under certain patent and other intellectual property rights of Arcion to develop, manufacture, market, and sell gel products containing clonidine (or a derivative thereof), alone or in combination with other active ingredients, for topical administration for the treatment of painful diabetic neuropathy (or PDN) and other indications.

Clonidine is thought to relieve pain by decreasing the abnormal excitability of these functional nociceptors. The effectiveness of topical clonidine gel has been assessed in reducing pain in PDN in a double-blind, placebo-controlled, Phase 2 study conducted by Arcion where the primary study endpoint was the change in pain intensity over a 3 month treatment period in diabetic foot pain. A significant treatment difference was seen in the planned subset analysis of diabetic patients who had documented evidence of functioning pain receptors in the skin of the lower leg (p=0.01, n=63) thus, at a minimum, supporting the effectiveness of topical clonidine in diabetic patients with functioning pain receptors of the skin. In the trial, approximately 50% of the patients with PDN demonstrated functional nociceptors in the skin in the painful region as revealed by a response to topical capsaicin. In the overall population that included patients without functioning nerve receptors , there was a trend favoring topical clonidine gel (p=0.07, n= 182), though the overall results did not reach statistical significance.

Nearly 26 million people in the U.S. have diabetes according to the American Diabetes Association. A substantial number of these people have neuropathy as manifested by impaired sensation and pain in the extremities, most commonly the feet. Patients with PDN often experience debilitating pain symptoms that affect day-to-day functioning and quality of life. Currently available oral treatments are modestly effective in relieving symptoms and are limited by systemic side effects and drug interactions. There are no topical products approved for the treatment of this painful condition.

Oral medications that are approved for the treatment of PDN include anticonvulsants such as Lyrica® (pregabalin), the antidepressant Cymbalta® (duloxetine) and the opioid Nucynta® (tapentadol), with sales for the treatment of neuropathic pain totaling over $3 billion in the U.S. according to Datamonitor. These treatments are modestly effective in relieving symptoms and their use can be limited by adverse effects and drug interactions. We believe that clonidine topical gel offers a novel mechanism of action to the available therapies with an improved safety and tolerability profile.

Pursuant to the Arcion Agreement, we are responsible for using commercially reasonable efforts to develop and commercialize clonidine products, including the use of such efforts to conduct certain clinical trials within certain time frames.

Upon execution of the Arcion Agreement, we issued to Arcion 500,516 unregistered shares of our common stock (having a fair market value of $2 million), which shares are subject to a nine month lock-up and certain limitations on sale thereafter. In addition, we are required to pay Arcion: (i) $2.5 million upon filing and acceptance by FDA of an NDA with respect to a clonidine product payable, at our option, in cash or unregistered shares of our common stock and (ii) up to a potential $60 million in cash payments upon achieving certain pre-determined sales thresholds in the U.S., none of which occur prior to achieving at least $200 million in U.S. net sales.

In addition, we shall pay Arcion up to $35 million in cash on initial FDA approval of a clonidine product, subject to certain qualifications to be met. All milestone payments due Arcion under the Arcion Agreement are payable only once each. In addition to milestone payments, we will also pay Arcion certain low single to double digit royalties based on certain sales, which such royalties are subject to certain adjustments based on such sales.

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Additional Information

Since inception and through September 30, 2013, we have recorded accumulated losses totaling approximately $138.5 million. Our historical operating losses have resulted principally from our research and development activities, including clinical trial activities for our product candidates and general and administrative expenses. Ultimately, if we secure additional approvals from the FDA and other regulatory bodies throughout the world for our product candidates, our goal will be to augment our current sources of revenue and, as applicable, deferred revenue (principally licensing fees), with sales of such products or royalties from such sales, on which we may pay royalties or other fees to our licensors and/or third-party collaborators as applicable.

We have based our estimates of development costs, market size estimates, peak annual sales projections and similar matters described or incorporated by reference in this prospectus supplement on our market research, third party reports and publicly available information which we consider reliable. However, readers are advised that the projected dates for filing and approval of our Investigational New Drug Applications (INDs) or New Drug Applications (NDAs) with the FDA or other regulatory authorities, our estimates of development costs, our projected sales and similar metrics regarding ONSOLIS®, BEMA® Buprenorphine, BUNAVAIL™, Clonidine Topical Gel or any other product candidates discussed elsewhere (or incorporated by reference) in this prospectus supplement are merely estimates and subject to many factors, many of which may be beyond our control, which will likely cause us to revise such estimates. Readers are also advised that our projected sales figures do not take into account the royalties and other payments we will need to make to our licensors and strategic partners. Our estimates are based upon our management s reasonable judgments given the information available and their previous experiences, although such estimates may not prove to be accurate.

We were incorporated in the State of Indiana in 1997 and were reincorporated as a Delaware corporation in 2002. Our executive offices are located at 801 Corporate Center Drive, suite 210, Raleigh, North Carolina, 27607, telephone number (919) 582-9050.

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The Offering

Common stock offered by us	An aggregate of 7,500,000 shares of common stock at a price per share of $8.00.
Common stock to be outstanding after this offering	47,271,772 shares based on 39,771,772 shares outstanding as of the date of this prospectus supplement.
Use of proceeds	Although we have not yet identified specific uses for the net proceeds we may receive from the sale of any securities offered under this prospectus supplement, we currently anticipate using such proceeds for (i) sales, marketing and other commercialization activities to support the anticipated launch of BUNAVAIL if the product is approved by the FDA, which we are actively preparing to commercialize on our own, (ii) for the clinical and regulatory advancement of Clonidine Topical Gel for painful diabetic neuropathy, (iii) for potential acquisitions of clinical stage or marketed products to support our product pipeline in the therapeutic areas of central nervous system, addiction and pain medicine; (iv) to support of our existing partnered products; and (v) for general working capital purposes. We may temporarily invest the net proceeds in investment-grade, interest-bearing securities until they are used for their stated purpose. We have not determined the amount of net proceeds to be used specifically for such purposes. As a result, management will retain broad discretion over the allocation of the net proceeds. See Use of Proceeds on page SA-15 of this prospectus supplement.
Risk factors	Investing in our common stock involves a high degree of risk. Please read the information contained in and incorporated by reference under the heading Risk Factors on page SA-10 of this prospectus supplement, and under similar headings in the other documents that are filed after the date hereof and incorporated by reference into this prospectus supplement.
NASDAQ Capital Market symbol	BDSI

The number of shares of our common stock that will be outstanding immediately after this offering as shown above is based on 39,771,772 shares outstanding as of February 7, 2014. The number of shares outstanding as of the date of this prospectus supplement, as used throughout this prospectus supplement, unless otherwise indicated, excludes the following, all as of February 7, 2014:

2,635,288 shares of our common stock issuable upon exercise of stock options outstanding under our Amended and Restated 2001 Incentive Plan which had at a weighted average exercise price of $4.17 per share and 962,971 shares of our common stock issuable upon exercise of stock options outstanding under our 2011 Equity Incentive Plan which had a weighted average exercise price of $3.44 per share;

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2,041,792 shares of our common stock issuable upon the exercise of warrants outstanding with a weighted average exercise price of $3.75 per share;

1,078,336 shares of our common stock issuable upon the vesting of restricted stock units under our 2011 Equity Incentive Plan and 1,069,014 shares of our common stock issuable upon the vesting of restricted stock units under our Management Long Term Incentive Plan; and

2,709,300 shares of our common stock issuable upon conversion of our outstanding Series A Preferred Stock.

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RISK FACTORS

Investing in our common stock involves a high degree of risk. Before deciding whether to invest in our common stock, you should consider carefully the risks and uncertainties described below. You should also consider the risks, uncertainties and assumptions discussed under the heading Risk Factors included in our most recent Annual Report on Form 10-K, which is on file with the SEC and are incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we have filed or may file with the SEC in the future. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. If any of these risks actually occurs, our business, business prospects, financial condition or results of operations could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section below entitled Cautionary Note Regarding Forward-Looking Statements.

Additional Risks Related to This Offering

Our management will have broad discretion as to the use of the proceeds from this offering, and may not use the proceeds effectively.

Because we have not designated the amount of net proceeds from this offering to be used for any particular purpose, our management will have broad discretion as to the application of the net proceeds from this offering and could use them for purposes other than those contemplated at the time of the offering. Our management may use the net proceeds for corporate purposes that may not improve our financial condition or market value.

You may experience immediate and substantial dilution.

The offering price per share in this offering may exceed the net tangible book value per share of our common stock outstanding prior to this offering. Assuming that an aggregate of 7,500,000 shares of our common stock are sold at a price of $8.00 per share, for aggregate gross proceeds of $60 million, and after deducting commissions and estimated aggregate offering expenses payable by us, you will experience immediate dilution of $1.14 per share, representing the difference between our as adjusted pro forma net tangible book value per share as of September 30, 2013 after giving effect to this offering and the assumed offering price. The exercise of outstanding stock options and warrants may result in further dilution of your investment. See the section entitled Dilution below for a more detailed illustration of the dilution you would incur if you participate in this offering.

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

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

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We do not intend to pay dividends in the foreseeable future.

We have never paid cash dividends on our common stock. We currently intend to retain our future earnings, if any, to finance the operation and growth of our business and currently do not plan to pay any cash dividends in the foreseeable future.

Sales of a significant number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock.

Sales of a substantial number of shares of our common stock in the public markets, or the perception that such sales could occur, could depress the market price of our common stock and impair our ability to raise capital through the sale of additional equity securities. We cannot predict the effect that future sales of our common stock would have on the market price of our common stock.

Our stock price is likely to be volatile, and the market price of our common stock may decline in value in the future.

The market price of our common stock has fluctuated in the past and is likely to fluctuate in the future. During the period from January 1, 2010 to February 7, 2014, our stock price has ranged from a low of $0.77 to a high of $9.49. Market prices for securities of pharmaceutical, biotechnology and other life sciences companies have historically been particularly volatile. Some of the factors that may cause the market price of our common stock to fluctuate include:

- the results of our clinical trials;
- the results of clinical trials conducted by others on drugs that would compete with our drug candidates;
- the announcements of those data, particularly at high profile medical meetings, and the investment community s perception of and reaction to those data;
- the ability of our drug candidates to be dosed safely in combination with other drugs and/or drug candidates, both ours and others;
- the entry into, modification of, or termination of key agreements, or any new collaboration agreement we may enter;
- market expectations about the timeliness of our entry into, or failure to enter, collaboration arrangements with third parties;
- the results of regulatory reviews relating to the approval of our drug candidates;

our failure to obtain patent protection for any of our drug candidates or the issuance of third party patents that cover our drug candidates;

the initiation of, material developments in, or conclusion of litigation to enforce or defend any of our intellectual property rights;

failure of any of our drug candidates, if approved, to achieve any level of commercial success;

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general and industry-specific economic conditions that may affect our research and development expenditures;

the launch of drugs by others that would compete with our drug candidates;

the failure or discontinuation of any of our research programs;

issues in manufacturing our drug candidates or any approved products;

the introduction of technological innovations or new commercial products by us or our competitors;

future sales of our common stock;

period-to-period fluctuations in our financial results;

low trading volume of our common stock;

failure to build a commercial organization in the future to launch our products; and

failure to commercialize any of our products in the future.

In addition, if we fail to reach an important research, development or commercialization milestone or result by a publicly expected deadline, even if by only a small margin, there could be significant impact on the market price of our common stock. Additionally, as we approach the announcement of important clinical data or other significant information and as we announce such results and information, we expect the price of our common stock to be particularly volatile, and negative results would have a substantial negative impact on the price of our common stock.

The stock markets in general have experienced substantial volatility that has often been unrelated to the operating performance of individual companies. These broad market fluctuations may adversely affect the trading price of our common stock.

In the past, following periods of volatility in the market price of a company s securities, stockholders have often instituted class action securities litigation against those companies. Such litigation, if instituted, could result in substantial costs and diversion of management attention and resources, which could significantly harm our business operations and reputation.

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents we have filed or will file with the SEC that are or will be incorporated by reference into this prospectus supplement contain forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that involve risks and uncertainties. Any statements contained, or incorporated by reference, in this prospectus supplement that are not statements of historical fact may be forward-looking statements. When we use the words anticipate, believe, could, estimate, expect, intend, may, plan, predict, proj similar terms and phrases, including references to assumptions, we are identifying forward-looking statements. Forward-looking statements involve risks and uncertainties which may cause our actual results, performance or achievements to be materially different from those expressed or implied by forward-looking statements.

A variety of factors, some of which are outside our control, may cause our operating results to fluctuate significantly. They include:

- our plans and expectations regarding the timing and outcome of our research, development, manufacturing, distribution and commercialization efforts, whether with partners or on our own, relating to our BEMA® drug delivery technology platform and any proposed products, product candidates or approved products, including our sole approved product, ONSOLIS®, our partnered product candidate, BEMA® Buprenorphine and our other lead product candidate, BUNAVAIL™, as well as Clonidine Topical Gel;

- the domestic and international regulatory process and related laws, rules and regulations governing our technologies and our approved and proposed products and formulations, including: (i) the timing, status and results of our or our commercial partners filings with the U.S. Food and Drug Administration and its foreign equivalents, (ii) the timing, status and results of non-clinical work and clinical studies, including regulatory review thereof and (ii) the heavily regulated industry in which we operate our business generally;

- our ability to enter into strategic partnerships for the development, commercialization, manufacturing and distribution of our products and product candidates;

- our ability, or the ability of our commercial partners to actually develop, commercialize, manufacture or distribute our products and product candidates;

- our ability to generate commercially viable products and the market acceptance of our BEMA® technology platform and our proposed products and product candidates;

- our ability to finance our operations on acceptable terms, either through the raising of capital, the incurrence of convertible or other indebtedness or through strategic financing or commercialization partnerships;

our expectations about the potential market sizes and market participation potential for our approved or proposed products;

the protection and control afforded by our patents or other intellectual property, and any interest patents or other intellectual property that we license, or our or our partners ability to enforce our rights under such owned or licensed patents or other intellectual property;

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the outcome of ongoing or potential future litigation or other claims or disputes relating to our business, technologies, products or processes;

our expected revenues (including sales, milestone payment and royalty revenues) from our products or product candidates and any related commercial agreements of ours;

the ability of our manufacturing partners to supply us or our commercial partners with clinical or commercial supplies of our products in a safe, timely and regulatory compliant manner and the ability of such partners to address any regulatory issues that have arisen or may in the future arise;

our ability to retain members of our management team and our employees;

competition existing today or that will likely arise in the future; and

regulatory oversight of our company by the SEC, FDA, the NASDAQ Stock Market and other regulatory agencies.

The foregoing does not represent an exhaustive list of risks that may impact upon the forward-looking statements used herein or in the documents incorporated by reference herein. Please see Risk Factors in our reports filed with the SEC or in this prospectus supplement for additional risks which could adversely impact our business and financial performance.

Moreover, new risks regularly emerge and it is not possible for our management to predict all risks, nor can we assess the impact of all risks on our business or the extent to which any risk, or combination of risks, may cause actual results to differ from those contained in any forward-looking statements. All forward-looking statements included in this prospectus supplement are based on information available to us on the date hereof or thereof. Except to the extent required by applicable laws or rules, we undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained throughout (or incorporated by reference in) this prospectus supplement, any accompanying prospectus and the documents we have filed with the SEC.

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USE OF PROCEEDS

We intend to use the net proceeds from the sale of any securities offered under this prospectus supplement for general corporate purposes. Although we have not yet identified specific uses for these proceeds, we currently anticipate using the proceeds for some or all of the following purposes:

- to execute sales, key marketing and other commercialization activities to support the anticipated launch of BUNAVAIL if the product is approved by the FDA, ,which we are actively preparing to commercialize on our own, such as support advertising and promotion, sales force, recruitment, training and development, managed markets activities, post-approved clinical studies and manufacturing;

- for the clinical and regulatory advancement of Clonidine Topical Gel for painful diabetic neuropathy, including the initiation and completion of our Phase III clinical program as well as manufacturing of product stability batches;

- for potential acquisitions of products to support our product pipeline in the therapeutic areas of central nervous system, addiction and pain medicine clinical stage or marketed;

- to support of our existing partnered products; and

- for general working capital purposes.

We are not presently a party to any definitive agreements to make any product or technology acquisitions.

The amounts and timing of our use of the net proceeds from this offering will depend on a number of factors, such as the timing and progress of our research and development efforts, the timing and progress of any collaborative or strategic partnering efforts or self commercialization efforts, and the competitive environment for our planned products. Accordingly, our management will have broad discretion in the timing and application of these proceeds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing instruments.

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DILUTION

If you invest in our common stock, your interest will be diluted immediately to the extent of the difference between the public offering price per share and the adjusted net tangible book value per share of our common stock after this offering.

Our net tangible book value on September 30, 2013 was approximately $2.89 million, or $0.07 per share. Net tangible book value is total assets minus the sum of liabilities and intangible assets. Net tangible book value per share is net tangible book value divided by the total number of shares outstanding.

After giving effect to the sale by us of 7,500,000 shares of common stock in this offering at an offering price of $8.00 per share, and after deducting estimated offering commissions and expenses payable by us, our net tangible book value as of September 30, 2013 would be approximately $60.4 million, or $1.21 per share of common stock. This represents an immediate increase in net tangible book value of $1.14 per share to our existing stockholders and an immediate dilution in net tangible book value of $1.14 per share to investors participating in this offering. The following table illustrates this dilution per share to investors participating in this offering:

Offering price per share		$ 8.00
Net tangible book value per share as of September 30, 2013		$ .07
Increase per share attributable to new investors	$ 1.14	
Net tangible book value per share after giving effect to this offering		$ 1.21
Dilution per share to new investors		$ 1.14

The number of shares of our common stock that will be outstanding immediately after this offering as shown above is based on 39,771,772 shares outstanding as of February 7, 2014. The number of shares outstanding as of the date of this prospectus supplement, as used throughout this prospectus supplement, including in the above discussion and table, unless otherwise indicated, excludes the following, all as of February 7, 2014:

- 2,635,288 shares of our common stock issuable upon exercise of stock options outstanding under our Amended and Restated 2001 Incentive Plan which had at a weighted average exercise price of $4.17 per share and 962,971 shares of our common stock issuable upon exercise of stock options outstanding under our 2011 Equity Incentive Plan, as amended which had a weighted average exercise price of $3.44 per share;

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2,041,792 shares of our common stock issuable upon the exercise of warrants outstanding with a weighted average exercise price of $3.75 per share;

1,078,336 shares of our common stock issuable upon the vesting of restricted stock units under our 2011 Equity Incentive Plan, as amended and 1,069,014 shares of our common stock issuable upon the vesting of restricted stock units under our Management Long Term Incentive Plan; and

2,709,300 shares of our common stock issuable upon conversion of our outstanding Series A Preferred Stock.

To the extent that any of our outstanding options or warrants are exercised, we grant additional options or other awards under our stock incentive plan or issue additional warrants, or we issue additional shares of common stock in the future, there may be further dilution.

PRICE RANGE OF COMMON STOCK

Our common stock is listed on the NASDAQ Capital Market under the symbol BDSI. The following table shows the high and low per share sale prices of our common stock for the periods indicated.

Fiscal Year Ending December 31, 2014		
1st Quarter (as of February 7, 2014)	$ 9.49	$ 5.65
Fiscal Year Ending December 31, 2013		
1st Quarter	$ 4.85	$ 3.76
2nd Quarter	5.68	3.96
3rd Quarter	5.55	4.05
4th Quarter	6.09	4.16
Fiscal Year Ended December 31, 2012		
1st Quarter	$ 2.55	$ 0.80
2nd Quarter	4.54	2.39
3rd Quarter	6.48	4.26
4th Quarter	6.89	3.98
Fiscal Year Ended December 31, 2011		
1st Quarter	$ 3.82	$ 3.22
2nd Quarter	3.89	3.23
3rd Quarter	3.99	1.09
4th Quarter	1.13	0.78

On February 7, 2014, the last sale price reported on the NASDAQ Capital Market for our common stock was $8.26 per share.

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DIVIDEND POLICY

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

PLAN OF DISTRIBUTION

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering an aggregate of 7,500,000 shares of our common stock directly to institutional investors pursuant to a Securities Purchase Agreement, dated February 7, 2014, at a price per share of $8.00. The price of the shares issued in this offering are calculated with reference to the recent volume weighted average closing price of our publicly traded common stock.

No underwriter or placement agent has been involved in the preparation of, or has performed any review of, this prospectus supplement or the accompanying prospectus.

The offering price of the common stock offered hereby was determined by reference to the recent trading price of our common stock on the Nasdaq Capital Market.

The expenses of this offering are estimated to be approximately $2,537,500 and are payable by us, including but not limited to reimbursement to the lead investor for certain legal expenses up to $10,000.

We currently anticipate that the closing of the sale of the shares offered hereby will take place on or before February 12, 2014. Such closing is subject to conditions which are provided for in the Securities Purchase Agreement.

LEGAL MATTERS

The validity of the issuance of the common stock offered by this prospectus supplement has been passed upon for us by Ellenoff Grossman & Schole LLP, New York, New York.

EXPERTS

The financial statements and management s assessment of the effectiveness of internal control over financial reporting (which is included in Management s Report on Internal Control over Financial Reporting) incorporated in this prospectus supplement by reference to the Annual Report on Form 10-K for the year ended December 31, 2012 have been so incorporated in reliance on the report of Cherry Bekaert LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus supplement is part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and does not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus supplement to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated by reference into this prospectus supplement for a copy of such contract, agreement or other document.

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

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

We are incorporating by reference certain documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in the documents incorporated by reference is considered to be part of this prospectus supplement. Statements contained in documents that we file with the SEC and that are incorporated by reference in this prospectus supplement will automatically update and supersede information contained in this prospectus supplement, including information in previously filed documents or reports that have been incorporated by reference in this prospectus supplement, to the extent the new information differs from or is inconsistent with the old information. We have filed or may file the following documents with the SEC and they are incorporated herein by reference as of their respective dates of filing:

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2012, as filed with the SEC on March 18, 2013;

Our Current Report on Form 8-K, as filed with the SEC on January 22, 2013;

Our Current Report on Form 8-K, as filed with the SEC on February 28, 2013;

Our Current Report on Form 8-K, as filed with the SEC on March 19, 2013;

Our Current Report on Form 8-K, as filed with the SEC on April 1, 2013;

Our Current Report on Form 8-K, filed with the SEC on April 29, 2013;

Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, as filed with the SEC on May 9, 2013;

Our Current Report on Form 8-K, as filed with the SEC on May 9, 2013;

Our Current Report on Form 8-K, as filed with the SEC on June 10, 2013;

Our Proxy Statement on Schedule 14A, as filed with the SEC on June 12, 2013;

Our Current Report on Form 8-K, as filed with the SEC on July 11, 2013;

Our Current Report on Form 8-K, as filed with the SEC on July 19, 2013;

Our Current Report on Form 8-K, as filed with the SEC on July 29, 2013;

Our Current Report on Form 8-K, as filed with the SEC on August 1, 2013;

Our Quarterly Report on Form 10-Q for the quarter and six months ended June 30, 2013, as filed with the SEC on August 9, 2013;

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Our Current Report on Form 8-K, as filed with the SEC on August 9, 2013;

Our Current Report on Form 8-K, as filed with the SEC on September 4, 2013;

Our Current Report on Form 8-K, as filed with the SEC on October 9, 2013;

Our Current Report on Form 8-K, as filed with the SEC on October 23, 2013;

Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2013, as filed with the SEC on November 12, 2013;

Our Current Report on Form 8-K, as filed with the SEC on November 13, 2013;

Our Current Report on Form 8-K, as filed with the SEC on December 2, 2013;

Our Current Report on Form 8-K, as filed with the SEC on January 10, 2014;

Our Current Report on Form 8-K, as filed with the SEC on January 24, 2014;

The description of our common stock contained in our Form 8-A filed on June 19, 2002, as amended June 20, 2002, and as it may be further amended from time to time; and

All documents filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement and before the termination or completion of this offering of common stock shall be deemed to be incorporated by reference in this prospectus supplement and to be a part of it from the filing dates of such documents, except in each case for information contained in any such filing where we indicate that such information is being furnished and is not to be considered filed under the Securities Exchange Act of 1934, as amended.

You may request a copy of these filings at no cost (other than exhibits unless such exhibits are specifically incorporated by reference) by writing or telephoning us at the following address and telephone number:

BioDelivery Sciences International, Inc.

801 Corporate Center Drive, Suite 210

Raleigh, North Carolina 27607

Telephone: (919) 582-9050

Attention: Ernest R. De Paolantonio

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Prospectus

$75,000,000

Common Stock
Debt Securities
Rights

Preferred Stock
Warrants
Units

We may offer and sell from time to time, in one or more series, any one of the following securities of our company, for total gross proceeds up to $75,000,000:

- common stock;
- preferred stock;
- secured or unsecured debt securities consisting of notes, debentures or other evidences of indebtedness which may be senior debt securities, senior subordinated debt securities or subordinated debt securities, each of which may be convertible into equity securities;
- warrants to purchase our securities;
- rights to purchase any of the foregoing securities; or
- units comprised of, or other combinations of, the foregoing securities.

We will provide specific terms of these offerings and securities in one or more supplements to this prospectus. We may also authorize one or more free writing prospectuses to be provided to you in connection with these offerings. The prospectus supplement, and any documents incorporated by reference, may also add, update or change information contained in this prospectus. You should read this prospectus, the applicable prospectus supplement, any documents incorporated by reference and any related free writing prospectus carefully before buying any of the securities being offered.

We may offer and sell these securities to or through one or more underwriters, dealers and agents, or directly to purchasers, on a continuous or delayed basis.

Our common stock is traded on the Nasdaq Capital Market under the symbol BDSI. The last reported sale price of our common stock on The NASDAQ Capital Market on November 25, 2013 was $4.66 per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading Risk Factors contained in the applicable prospectus supplement and in any related free writing prospectus, and under similar headings in the other documents that are incorporated by reference into this prospectus or any prospectus supplement before making a decision to purchase our securities.

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

The date of this prospectus is December 18, 2013.

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You should rely only on the information we have provided or incorporated by reference in this prospectus or in any prospectus supplement. We have not authorized anyone to provide you with information different from that contained or incorporated by reference in this prospectus or in any prospectus supplement.

This prospectus and any prospectus supplement is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

You should assume that the information contained in this prospectus and in any prospectus supplement is accurate only as of their respective dates and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any prospective supplement or any sale of securities.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, utilizing a shelf registration process. Under this shelf registration process, we may offer and sell, either individually or in combination, in one or more offerings, any combination of the securities described in this prospectus, for total gross proceeds of up to $75,000,000. This prospectus provides you with a general description of the securities we may offer. Each time we offer securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also authorize one or more free writing prospectuses to be provided to you that may contain material information relating to these offerings. The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change any of the information contained in this prospectus or in the documents that we have incorporated by reference into this prospectus.

We urge you to read carefully this prospectus, any applicable prospectus supplement and any free writing prospectuses we have authorized for use in connection with a specific offering, together with the information incorporated herein by reference as described under the heading Incorporation of Certain Information by Reference, before investing in any of the securities being offered. You should rely only on the information contained in, or incorporated by reference into, this prospectus and any applicable prospectus supplement, along with the information contained in any free writing prospectuses we have authorized for use in connection with a specific offering. We have not authorized anyone to provide you with different or additional information. This prospectus is an offer to sell only the securities offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so.

The information appearing in this prospectus, any applicable prospectus supplement or any related free writing prospectus is accurate only as of the date on the front of the document and any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus, any applicable prospectus supplement or any related free writing prospectus, or any sale of a security. Our business, financial condition, results of operations and prospects may have changed since those dates.

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

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

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CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any accompanying prospectus supplement and the documents we have filed or will file with the SEC that are or will be incorporated by reference into this prospectus and the accompanying prospectus supplement contain forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that involve risks and uncertainties. Any statements contained, or incorporated by reference, in this prospectus and any accompanying prospectus that are not statements of historical fact may be forward-looking statements. When we use the words anticipate, believe, could, estimate, expe intend, may, plan, predict, project, will and other similar terms and phrases, including references to assumptions, we are identifying forward-looking statements. Forward-looking statements involve risks and uncertainties which may cause our actual results, performance or achievements to be materially different from those expressed or implied by forward-looking statements.

A variety of factors, some of which are outside our control, may cause our operating results to fluctuate significantly. They include:

- our plans and expectations regarding the timing and outcome of our research, development, manufacturing, distribution and commercialization efforts, whether with partners or on our own, relating to our BEMA® drug delivery technology platform and any proposed products, product candidates or approved products, including our sole approved product, ONSOLIS®, our partnered product candidate, BEMA® Buprenorphine and our other lead product candidate, BUNAVAIL™, as well as Clonidine Topical Gel;

- the domestic and international regulatory process and related laws, rules and regulations governing our technologies and our approved and proposed products and formulations, including: (i) the timing, status and results of our or our commercial partners filings with the U.S. Food and Drug Administration and its foreign equivalents, (ii) the timing, status and results of non-clinical work and clinical studies, including regulatory review thereof and (ii) the heavily regulated industry in which we operate our business generally;

- our ability to enter into strategic partnerships for the development, commercialization, manufacturing and distribution of our products and product candidates;

- our ability, or the ability of our commercial partners to actually develop, commercialize, manufacture or distribute our products and product candidates;

- our ability to generate commercially viable products and the market acceptance of our BEMA® technology platform and our proposed products and product candidates;

- our ability to finance our operations on acceptable terms, either through the raising of capital, the incurrence of convertible or other indebtedness or through strategic financing or commercialization partnerships;

- our expectations about the potential market sizes and market participation potential for our approved or proposed products;

- the protection and control afforded by our patents or other intellectual property, and any interest patents or other intellectual property that we license, or our or our partners ability to enforce our rights under such owned or licensed patents or other intellectual property;

- the outcome of ongoing or potential future litigation or other claims or disputes relating to our business, technologies, products or processes;

our expected revenues (including sales, milestone payment and royalty revenues) from our products or product candidates and any related commercial agreements of ours;

the ability of our manufacturing partners to supply us or our commercial partners with clinical or commercial supplies of our products in a safe, timely and regulatory compliant manner and the ability of such partners to address any regulatory issues that have arisen or may in the future arise;

our ability to retain members of our management team and our employees;

competition existing today or that will likely arise in the future; and

regulatory oversight of our company by the SEC, FDA the NASDAQ Stock Market and other regulatory agencies.

The foregoing does not represent an exhaustive list of risks that may impact upon the forward-looking statements used herein or in the documents incorporated by reference herein. Please see Risk Factors in our reports filed with the SEC or in a prospectus supplement related to this prospectus for additional risks which could adversely impact our business and financial performance.

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Moreover, new risks regularly emerge and it is not possible for our management to predict all risks, nor can we assess the impact of all risks on our business or the extent to which any risk, or combination of risks, may cause actual results to differ from those contained in any forward-looking statements. All forward-looking statements included in this prospectus and any accompanying prospectus supplement are based on information available to us on the date hereof or thereof. Except to the extent required by applicable laws or rules, we undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise. All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements contained throughout (or incorporated by reference in) this prospectus, any accompanying prospectus and the documents we have filed with the SEC.

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PROSPECTUS SUMMARY

The following summary highlights selected information contained or incorporated by reference in this prospectus. This summary does not contain all of the information you should consider before investing in the securities. Before making an investment decision, you should read the entire prospectus and any supplement hereto carefully, including the risk factors section as well as the financial statements and the notes to the financial statements incorporated herein by reference.

In this prospectus and any amendment or supplement hereto, unless otherwise indicated, the terms BioDelivery Sciences International, Inc., BDSI, the Company, we, us, and our refer and relate to BioDelivery Sciences International, Inc. and its consolidated subsidiaries.

Overview

We are a specialty pharmaceutical company that is developing and commercializing, either on our own or in partnerships with third parties, new applications of proven therapeutics to address important unmet medical needs using both proven and new drug delivery technologies. We have developed and are continuing to develop pharmaceutical products aimed principally in the areas of pain management and addiction.

In formulating our products and product candidates, we utilize the novel, patent protected and proprietary BioErodible MucoAdhesive (known as BEMA®) drug delivery technology, a small, erodible polymer film for application to the buccal mucosa (the lining inside the cheek). Our first U.S. Food and Drug Administration (which we refer to as the FDA) approved product, ONSOLIS® (fentanyl buccal soluble film), as well as two of our product candidates, utilize our BEMA® technology.

In addition to our FDA-approved product ONSOLIS®, our lead products in development are:

BEMA® Buprenorphine, a potential treatment for moderate to severe chronic pain, which is currently in Phase 3 trials and which is partnered on a worldwide basis to Endo Health Solutions, Inc. (which we refer to herein as Endo);

BUNAVAIL™ (formerly known as BEMA® Buprenorphine/Naloxone, or BNX), a high dose formulation of buprenorphine along with an abuse deterrent agent naloxone, which is a potential treatment for opioid dependence, for which we filed a New Drug Application (or NDA) with the FDA in late July 2013, and which NDA was accepted by the FDA on October 9, 2013; and

Clonidine Topical Gel, a topical administration of the approved product clonidine for the potential treatment of painful diabetic neuropathy and other indications, for which we plan to prepare for a confirmatory Phase 2b study in the later portion of 2013. On December 2, 2013, we announced that we engaged in a positive pre-NDA meeting with the FDA regarding the clinical development program for Clonidine Topical Gel, which will allow the program to proceed to Phase 3 Clinical Studies in the first quarter of 2014.

ONSOLIS ® and our product candidates such as BEMA® Buprenorphine, BUNAVAIL™ and Clonidine Topical Gel may also have broader indications. When presented with viable commercial opportunities for broader indications of our products, we will consider developing the product for those uses. We also continue to explore the use of the BEMA® technology with additional pharmaceutical products that may fulfill an unmet medical need.

We have worked with other delivery technologies in the past, and as part of our corporate growth strategy, we may seek to acquire or license additional drug delivery technologies or other development stage products in novel technologies such as Clonidine Topical Gel. Should we gain access to such technologies, we would seek to formulate these technologies with proven, FDA approved therapeutics and utilize our development and commercialization experience to, either by ourselves or through commercial partnerships, navigate the resulting products through the regulatory review process and ultimately bring them to the marketplace. We plan to follow the same strategy should we acquire or license other development stage products in novel technologies.

Our current development strategy focuses primarily on our ability to utilize the FDA s 505(b)(2) regulatory process to obtain more timely and efficient approval of new formulations of previously approved, active therapeutics incorporated into our drug delivery technologies. Because the 505(b)(2) approval process is designed to address new formulations of previously approved drugs, we believe it has the potential to be more cost efficient and expeditious, and have less regulatory approval risk, than other FDA approval approaches.

Additional Information

Since inception and through September 30, 2013, we have recorded accumulated losses totaling approximately $138.5 million. Our historical operating losses have resulted principally from our research and development activities, including clinical trial activities for our product candidates and general and administrative expenses. Ultimately, if we secure additional approvals from the FDA and other regulatory bodies throughout the world for our product candidates, our goal will be to augment our current sources of revenue and, as applicable, deferred revenue (principally licensing fees), with sales of such products or royalties from such sales, on which we may pay royalties or other fees to our licensors and/or third-party collaborators as applicable.

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We have based our estimates of development costs, market size estimates, peak annual sales projections and similar matters described or incorporated by reference in this prospectus on our market research, third party reports and publicly available information which we consider reliable. However, readers are advised that the projected dates for filing and approval of our Investigational New Drug Applications (INDs) or New Drug Applications (NDAs) with the FDA or other regulatory authorities, our estimates of development costs, our projected sales and similar metrics regarding ONSOLIS®, BEMA® Buprenorphine, BUNAVAIL™, Clonidine Topical Gel or any other product candidates discussed elsewhere (or incorporated by reference) in this prospectus are merely estimates and subject to many factors, many of which may be beyond our control, which will likely cause us to revise such estimates. Readers are also advised that our projected sales figures do not take into account the royalties and other payments we will need to make to our licensors and strategic partners. Our estimates are based upon our management s reasonable judgments given the information available and their previous experiences, although such estimates may not prove to be accurate.

We were incorporated in the State of Indiana in 1997 and were reincorporated as a Delaware corporation in 2002. Our executive offices are located at 801 Corporate Center Drive, suite 210, Raleigh, North Carolina, 27607, telephone number (919) 582-9050.

The Securities We May Offer

We may offer and sell from time to time up to an aggregate of $75,000,000 of any of, or units comprised of, or other combinations of, the following securities:

Common Stock. We may issue shares of our common stock. Holders of common stock are entitled to receive ratably dividends if, as and when dividends are declared from time to time by our board of directors out of funds legally available for that purpose, after payment of dividends required to be paid on outstanding preferred stock or series common stock. Holders of common stock are entitled to one vote per share. Holders of common stock have no cumulative voting rights in the election of directors.

Preferred Stock. We may issue shares of our preferred stock in one or more series. Our board of directors will determine the dividend, voting, conversion and other rights of the series of preferred stock being offered.

Debt Securities. We may offer debt securities, which may be secured or unsecured, senior, senior subordinated or subordinated, may be guaranteed by our subsidiaries, and may be convertible into shares of our common stock. We may issue debt securities either separately or together with, upon conversion of or in exchange for other securities. It is likely that the debt securities that we may issue will not be issued under an indenture.

Warrants. We may issue warrants to purchase shares of preferred stock, common stock or debt securities of our company. We may issue warrants independently or together with other securities. Warrants sold with other securities as a unit may be attached to or separate from the other securities. To the extent the warrants are publicly-traded, we will issue warrants under one or more warrant agreements between us and a warrant agent that we will name in the applicable prospectus supplement.

Rights. We may issue rights to purchase of preferred stock or common stock or debt securities of our company. We may issue rights independently or together with other securities. Rights sold with other securities as a unit may be attached to or separate from the other securities and may be (but shall not be required to be) publicly-listed securities.

Units. We may also issue units comprised of one or more of the other securities described in this prospectus 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.

Prospectus Supplement. We will describe the terms of any such offering in a supplement to this prospectus. Any prospectus supplement may also add, update or change information contained in this prospectus. Such prospectus supplement will contain, among other pertinent information, the following information about the offered securities:

- title and amount;
- offering price, underwriting discounts and commissions or agency fees, and our net proceeds;

any market listing and trading symbol;

names of lead or managing underwriters or agents and description of underwriting or agency arrangements; and

the specific terms of the offered securities.

This prospectus may not be used to offer or sell securities without a prospectus supplement which includes a description of the method and terms of this offering.

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RISK FACTORS

We have included discussions of the risks, uncertainties and assumptions under the heading Risk Factors included in our Annual Report on Form 10-K for the year ended December 31, 2012 (as updated in our subsequently filed Quarterly Reports on Form 10-Q), which risk factors are incorporated by reference into this prospectus. See Where You Can Find More Information for an explanation of how to get a copy of this report. Additional risks related to our securities may also be described in a prospectus supplement and in any related free writing prospectus that we may authorize to be provided to you.

Investing in our securities involves a high degree of risk. Before deciding whether to invest in our securities, you should carefully consider the risk factors we describe in any prospectus supplement and in any related free writing prospectus that we may authorize to be provided to you or in any report incorporated by reference into this prospectus or such prospectus supplement, including our Annual Report on Form 10-K for the year ended December 31, 2012, or any Annual Report on Form 10-K or Quarterly Report on Form 10-Q that is incorporated by reference into this prospectus or such prospectus supplement after the date of this prospectus. Although we discuss key risks in those risk factor descriptions, additional risks not currently known to us or that we currently deem immaterial also may impair our business. Our subsequent filings with the SEC may contain amended and updated discussions of significant risks. We cannot predict future risks or estimate the extent to which they may affect our financial performance.

Please also read carefully the section above entitled Cautionary Note Regarding Forward-Looking Statements.

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RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of combined fixed charges and preference dividends to earnings for each of the periods indicated. You should read this table in conjunction with the financial statements and notes incorporated by reference in this prospectus.

		For Fiscal Year Ending				
	Nine Months Ended September 30, 2013	December 31, 2012	December 31, 2011	December 31, 2010	December 31, 2009	December 31, 2008
Ratios of combined fixed charges and preference dividends to earnings	N/A	45.10	N/A	N/A	1,518.60	N/A

We have computed the ratio of combined fixed charges and preference dividends to earnings set forth above by dividing pre-tax loss before fixed charges and preference dividends by fixed charges and preference dividends. Fixed charges are the sum of the following:

- interest expensed and capitalized;
- amortized premiums related to indebtedness; and
- an estimate of the interest within rental expense.

We did not pay any cash dividends on any shares of our capital stock during the periods set forth above.

We did not record earnings for the nine months ended September 30, 2013 or fiscal years ending December 31, 2011, 2010 and 2008. Accordingly, our earnings were insufficient to cover fixed charges for such periods and we are unable to disclose a ratio of combined fixed charges and preference dividends to earnings for such periods. The dollar amount of the deficiency in earnings available for fixed charges and preference dividends for the nine months ended September 30, 2013 and fiscal years ended December 31, 2011, 2010, 2008 was approximately $44.6 million, $23.3 million, $13.0 million and $17.2 million, respectively.

USE OF PROCEEDS

Except as otherwise disclosed in the applicable prospectus supplement, we intend to use the net proceeds from the sales of securities hereunder for the clinical and regulatory advancement of our product candidates; for commercialization of our products, including potential sales and marketing of products on our own behalf; to support of our partnered products; for potential acquisitions of new technologies and products, and to meet working capital needs. The amounts and timing of our use of the net proceeds from this offering will depend on a number of factors, such as the timing and progress of our research and development efforts, the timing and progress of any partnering and commercialization efforts, technological advances and the competitive environment for our products. As of the date of this prospectus, we cannot specify with certainty all of the particular uses for the net proceeds to us from the sale of the securities offered by us hereunder and the applicable prospectus supplement. Accordingly, our management will have broad discretion in the timing and application of these proceeds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing instruments.

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DESCRIPTION OF CAPITAL STOCK AND SECURITIES WE MAY OFFER

General

The following description of our capital stock (which includes a description of securities we may offer pursuant to the registration statement of which this prospectus, as the same may be supplemented, forms a part) does not purport to be complete and is subject to and qualified in its entirety by our certificate of incorporation, as amended, and our amended and restated bylaws and by the applicable provisions of Delaware law.

Our authorized capital stock consists of 75,000,000 shares of common stock and 5,000,000 shares of preferred stock. As of the date of this prospectus, our outstanding capital stock consists of 38,166,053 shares of common stock, $.001 par value, and 2,709,300 shares of Series A Preferred Stock, par value $.001 per share. These figures do not include securities that may be issued: (i) pursuant to outstanding warrants to purchase shares of our common stock, (ii) pursuant to our Amended and Restated 2001 Incentive Plan or (iii) pursuant to our 2011 Equity Incentive Plan, as amended.

We, directly or through agents, dealers or underwriters designated from time to time, may offer, issue and sell, together or separately, up to $75,000,000 in the aggregate of:

- common stock;
- preferred stock;
- secured or unsecured debt securities consisting of notes, debentures or other evidences of indebtedness which may be senior debt securities, senior subordinated debt securities or subordinated debt securities, each of which may be convertible into equity securities;
- warrants to purchase our securities;
- rights to purchase our securities; or
- units comprised of, or other combinations of, the foregoing securities.

We may issue the debt securities as exchangeable for or convertible into shares of common stock, preferred stock or other securities. The preferred stock may also be exchangeable for and/or convertible into shares of common stock, another series of preferred stock or other securities. The debt securities, the preferred stock, the common stock and the warrants are collectively referred to in this prospectus as the securities. When a particular series of securities is offered, a supplement to this prospectus will be delivered with this prospectus, which will set forth the terms of the offering and sale of the offered securities.

Common Stock

As of the date of this prospectus, there were 38,181,544 shares of common stock issued and 38,166,053 shares of common stock outstanding, held of record by approximately 123 stockholders. The holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders. Subject to preferential rights with respect to any outstanding preferred stock, holders of common stock are entitled to receive ratably such dividends as may be declared by our board of directors out of funds legally available therefore. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities and satisfaction of preferential rights of any outstanding preferred stock.

Our common stock has no preemptive or conversion rights or other subscription rights. There are no sinking fund provisions applicable to the common stock. The outstanding shares of common stock are fully paid and non-assessable.

Preferred Stock

Our certificate of incorporation, as amended, empowers our board of directors, without action by our shareholders, to issue up to 5,000,000 shares of preferred stock from time to time in one or more series, which preferred stock may be offered by this prospectus and supplements thereto. As of the date of this prospectus, we had 2,709,300 shares of preferred stock designated as Series A Preferred Stock and had 2,709,300 shares of Series A Preferred Stock issued and outstanding. Our board may fix the rights, preferences, privileges and restrictions of our authorized but undesignated preferred shares, including:

dividend rights and preferences over dividends on our common stock or any series of preferred stock;

the dividend rate (and whether dividends are cumulative);

conversion rights, if any;

voting rights;

rights and terms of redemption (including sinking fund provisions, if any);

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redemption price and liquidation preferences of any wholly unissued series of any preferred stock and the designation thereof of any of them; and

to increase or decrease the number of shares of any series subsequent to the issue of shares of that series but not below the number of shares then outstanding.

You should refer to the prospectus supplement relating to the series of preferred stock being offered for the specific terms of that series, including:

the title of the series and the number of shares in the series;

the price at which the preferred stock will be offered;

the dividend rate or rates or method of calculating the rates, the dates on which the dividends will be payable, whether or not dividends will be cumulative or noncumulative and, if cumulative, the dates from which dividends on the preferred stock being offered will cumulate;

the voting rights, if any, of the holders of shares of the preferred stock being offered;

the provisions for a sinking fund, if any, and the provisions for redemption, if applicable, of the preferred stock being offered, including any restrictions on the foregoing as a result of arrearage in the payment of dividends or sinking fund installments;

the liquidation preference per share;

the terms and conditions, if applicable, upon which the preferred stock being offered will be convertible into our common stock, including the conversion price, or the manner of calculating the conversion price, and the conversion period;

the terms and conditions, if applicable, upon which the preferred stock being offered will be exchangeable for debt securities, including the exchange price, or the manner of calculating the exchange price, and the exchange period;

any listing of the preferred stock being offered on any securities exchange;

a discussion of any material federal income tax considerations applicable to the preferred stock being offered;

any preemptive rights;

the relative ranking and preferences of the preferred stock being offered as to dividend rights and rights upon liquidation, dissolution or the winding up of our affairs;

any limitations on the issuance of any class or series of preferred stock ranking senior or equal to the series of preferred stock being offered as to dividend rights and rights upon liquidation, dissolution or the winding up of our affairs; and

any additional rights, preferences, qualifications, limitations and restrictions of the series.

Upon issuance, the shares of preferred stock will be fully paid and nonassessable, which means that its holders will have paid their purchase price in full and we may not require them to pay additional funds.

Any preferred stock terms selected by our board of directors could decrease the amount of earnings and assets available for distribution to holders of our common stock or adversely affect the rights and power, including voting rights, of the holders of our common stock without any further vote or action by the stockholders. The rights of holders of our common stock will be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued by us in the future. The issuance of preferred stock could also have the effect of delaying or preventing a change in control of our company or make removal of management more difficult.

Series A Preferred Stock

In connection with our registered financing which closed on December 3, 2012, our board of directors designated 2,709,300 of the 5,000,000 authorized shares of preferred stock as our Series A Non-Voting Convertible Preferred Stock, par value $.001 per share.

Rank

The Series A Preferred Stock will rank:

senior to our common stock;

senior to any class or series of our capital stock hereafter created specifically ranking by its terms junior to the Series A Preferred Stock; and

junior to any class or series of our capital stock hereafter created specifically ranking by its terms senior to the Series A Preferred Stock,

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in each case, as to dividends or distributions of assets upon our liquidation, dissolution or winding up whether voluntarily or involuntarily.

Conversion

Each share of Series A Preferred Stock is convertible into one share of our common stock (subject to adjustment as provided in the certificate of designation for the Series A Preferred Stock) at any time at the option of the holder, except that a holder will be prohibited from converting shares of Series A Preferred Stock into shares of common stock if, as a result of such conversion, such holder, together with its affiliates, would beneficially own more than 9.98% of the total number of shares of our common stock then issued and outstanding, which percentage may be increased or decreased by on sixty-five days notice from the holder of Series A Preferred Stock to us.

Liquidation Preference

In the event of our liquidation, dissolution or winding up, holders of Series A Preferred Stock will receive a payment equal to $.001 per share of Series A Preferred Stock before any proceeds are distributed to the holders of our common stock. After the payment of this preferential amount, and subject to the rights of holders of any class or series of our capital stock hereafter created specifically ranking by its terms senior to the Series A Preferred Stock and holders of Series A Preferred Stock will participate ratably in the distribution of any remaining assets with the common stock and any other class or series of our capital stock hereafter created that participates with the common stock in such distributions.

Voting Rights

Shares of Series A Preferred Stock generally have no voting rights, except as required by law and except that the consent of holders of a majority of the outstanding Series A Preferred Stock will be required to amend the terms of the Series A Preferred Stock or the certificate of designation for the Series A Preferred Stock.

Dividends

Holders of Series A Preferred Stock are entitled to receive, and we are required to pay, dividends on shares of the Series A Preferred Stock equal (on an as-if-converted-to-common-stock basis) to and in the same form as dividends (other than dividends in the form of common stock) actually paid on shares of the common stock when, as and if such dividends (other than dividends in the form of common stock) are paid on shares of the common stock.

Redemption

We are not obligated to redeem or repurchase any shares of Series A Preferred Stock. Shares of Series A Preferred Stock are not otherwise entitled to any redemption rights, or mandatory sinking fund or analogous fund provisions.

Listing

There is no established public trading market for the Series A Preferred Stock, and we do not expect a market to develop. In addition, we do not intend to apply for listing of the Series A Preferred Stock on any national securities exchange or trading system.

Fundamental Transactions

If, at any time that shares of Series A Preferred Stock are outstanding, we effect a merger or other change of control transaction, as described in the certificate of designation and referred to as a fundamental transaction, then a holder will have the right to receive, upon any subsequent conversion of a share of Series A Preferred Stock (in lieu of conversion shares) for each issuable conversion share, the same kind and amount of securities, cash or property as such holder would have been entitled to receive upon the occurrence of such fundamental transaction if such holder had been, immediately prior to such fundamental transaction, the holder of one share of common stock.

Warrants

We may issue warrants for the purchase of our common stock, preferred stock or debt securities or any combination thereof. Warrants may be issued independently or together with our common stock, preferred stock or debt securities and may be attached to or separate from any offered securities. To the extent warrants that we issue are to be publicly-traded, each series of such warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent. The warrant agent will act solely as our agent in

connection with such warrants. The warrant agent will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. This summary of certain provisions of the warrants is not complete. For the terms of a particular series of warrants, you should refer to the prospectus supplement for that series of warrants and the warrant agreement for that particular series.

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Debt Securities

As used in this prospectus, the term debt securities means the debentures, notes, bonds and other evidences of indebtedness that we may issue from time to time. The debt securities will either be senior debt securities, senior subordinated debt or subordinated debt securities. We may also issue convertible debt securities. Debt securities issued under an indenture (which we refer to herein as an Indenture) will be indenture entered into between us and a trustee to be named therein. It is likely that convertible debt securities will not be issued under an Indenture.

The Indenture or forms of Indentures, if any, will be filed as exhibits to the registration statement of which this prospectus is a part. The statements and descriptions in this prospectus or in any prospectus supplement regarding provisions of the Indentures and debt securities are summaries thereof, do not purport to be complete and are subject to, and are qualified in their entirety by reference to, all of the provisions of the Indentures (and any amendments or supplements we may enter into from time to time which are permitted under each Indenture) and the debt securities, including the definitions therein of certain terms.

General

Unless otherwise specified in a prospectus supplement, the debt securities will be direct secured or unsecured obligations of our company. The senior debt securities will rank equally with any of our other unsecured senior and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment to any senior indebtedness.

We may issue debt securities from time to time in one or more series, in each case with the same or various maturities, at par or at a discount. Unless indicated in a prospectus supplement, we may issue additional debt securities of a particular series without the consent of the holders of the debt securities of such series outstanding at the time of the issuance. Any such additional debt securities, together with all other outstanding debt securities of that series, will constitute a single series of debt securities under the applicable Indenture and will be equal in ranking.

Should an indenture relate to unsecured indebtedness, in the event of a bankruptcy or other liquidation event involving a distribution of assets to satisfy our outstanding indebtedness or an event of default under a loan agreement relating to secured indebtedness of our company or its subsidiaries, the holders of such secured indebtedness, if any, would be entitled to receive payment of principal and interest prior to payments on the senior indebtedness issued under an Indenture.

Prospectus Supplement

Each prospectus supplement will describe the terms relating to the specific series of debt securities being offered. These terms will include some or all of the following:

- the title of debt securities and whether they are subordinated, senior subordinated or senior debt securities;
- any limit on the aggregate principal amount of debt securities of such series;
- the percentage of the principal amount at which the debt securities of any series will be issued;
- the ability to issue additional debt securities of the same series;
- the purchase price for the debt securities and the denominations of the debt securities;
- the specific designation of the series of debt securities being offered;

the maturity date or dates of the debt securities and the date or dates upon which the debt securities are payable and the rate or rates at which the debt securities of the series shall bear interest, if any, which may be fixed or variable, or the method by which such rate shall be determined;

the basis for calculating interest if other than 360-day year or twelve 30-day months;

the date or dates from which any interest will accrue or the method by which such date or dates will be determined;

the duration of any deferral period, including the maximum consecutive period during which interest payment periods may be extended;

whether the amount of payments of principal of (and premium, if any) or interest on the debt securities may be determined with reference to any index, formula or other method, such as one or more currencies, commodities, equity indices or other indices, and the manner of determining the amount of such payments;

the dates on which we will pay interest on the debt securities and the regular record date for determining who is entitled to the interest payable on any interest payment date;

the place or places where the principal of (and premium, if any) and interest on the debt securities will be payable, where any securities may be surrendered for registration of transfer, exchange or conversion, as applicable, and notices and demands may be delivered to or upon us pursuant to the applicable Indenture;

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the rate or rates of amortization of the debt securities;

if we possess the option to do so, the periods within which and the prices at which we may redeem the debt securities, in whole or in part, pursuant to optional redemption provisions, and the other terms and conditions of any such provisions;

our obligation or discretion, if any, to redeem, repay or purchase debt securities by making periodic payments to a sinking fund or through an analogous provision or at the option of holders of the debt securities, and the period or periods within which and the price or prices at which we will redeem, repay or purchase the debt securities, in whole or in part, pursuant to such obligation, and the other terms and conditions of such obligation;

the terms and conditions, if any, regarding the option or mandatory conversion or exchange of debt securities;

the period or periods within which, the price or prices at which and the terms and conditions upon which any debt securities of the series may be redeemed, in whole or in part at our option and, if other than by a board resolution, the manner in which any election by us to redeem the debt securities shall be evidenced;

any restriction or condition on the transferability of the debt securities of a particular series;

the portion, or methods of determining the portion, of the principal amount of the debt securities which we must pay upon the acceleration of the maturity of the debt securities in connection with any event of default if other than the full principal amount;

the currency or currencies in which the debt securities will be denominated and in which principal, any premium and any interest will or may be payable or a description of any units based on or relating to a currency or currencies in which the debt securities will be denominated;

provisions, if any, granting special rights to holders of the debt securities upon the occurrence of specified events;

any deletions from, modifications of or additions to the events of default or our covenants with respect to the applicable series of debt securities, and whether or not such events of default or covenants are consistent with those contained in the applicable Indenture;

any limitation on our ability to incur debt, redeem stock, sell our assets or other restrictions;

the application, if any, of the terms of the applicable Indenture relating to defeasance and covenant defeasance (which terms are described below) to the debt securities;

what subordination provisions will apply to the debt securities;

the terms, if any, upon which the holders may convert or exchange the debt securities into or for our common stock, preferred stock or other securities or property;

whether we are issuing the debt securities in whole or in part in global form;

any change in the right of the trustee or the requisite holders of debt securities to declare the principal amount thereof due and payable because of an event of default;

the depositary for global or certificated debt securities, if any;

any material federal income tax consequences applicable to the debt securities, including any debt securities denominated and made payable, as described in the prospectus supplements, in foreign currencies, or units based on or related to foreign currencies;

any right we may have to satisfy, discharge and defease our obligations under the debt securities, or terminate or eliminate restrictive covenants or events of default in the Indentures, by depositing money or U.S. government obligations with the trustee of the Indentures;

the names of any trustees, depositories, authenticating or paying agents, transfer agents or registrars or other agents with respect to the debt securities;

to whom any interest on any debt security shall be payable, if other than the person in whose name the security is registered, on the record date for such interest, the extent to which, or the manner in which, any interest payable on a temporary global debt security will be paid if other than in the manner provided in the applicable Indenture;

if the principal of or any premium or interest on any debt securities is to be payable in one or more currencies or currency units other than as stated, the currency, currencies or currency units in which it shall be paid and the periods within and terms and conditions upon which such election is to be made and the amounts payable (or the manner in which such amount shall be determined);

the portion of the principal amount of any debt securities which shall be payable upon declaration of acceleration of the maturity of the debt securities pursuant to the applicable Indenture if other than the entire principal amount;

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if the principal amount payable at the stated maturity of any debt security of the series will not be determinable as of any one or more dates prior to the stated maturity, the amount which shall be deemed to be the principal amount of such debt securities as of any such date for any purpose, including the principal amount thereof which shall be due and payable upon any maturity other than the stated maturity or which shall be deemed to be outstanding as of any date prior to the stated maturity (or, in any such case, the manner in which such amount deemed to be the principal amount shall be determined); and

any other specific terms of the debt securities, including any modifications to the events of default under the debt securities and any other terms which may be required by or advisable under applicable laws or regulations.

Unless otherwise specified in the applicable prospectus supplement, the debt securities will not be listed on any securities exchange. Holders of the debt securities may present registered debt securities for exchange or transfer in the manner described in the applicable prospectus supplement. Except as limited by the applicable Indenture, we will provide these services without charge, other than any tax or other governmental charge payable in connection with the exchange or transfer.

Debt securities may bear interest at a fixed rate or a variable rate as specified in the prospectus supplement. In addition, if specified in the prospectus supplement, we may sell debt securities bearing no interest or interest at a rate that at the time of issuance is below the prevailing market rate, or at a discount below their stated principal amount. We will describe in the applicable prospectus supplement any special federal income tax considerations applicable to these discounted debt securities.

We may issue debt securities with the principal amount payable on any principal payment date, or the amount of interest payable on any interest payment date, to be determined by referring to one or more currency exchange rates, commodity prices, equity indices or other factors. Holders of such debt securities may receive a principal amount on any principal payment date, or interest payments on any interest payment date, that are greater or less than the amount of principal or interest otherwise payable on such dates, depending upon the value on such dates of applicable currency, commodity, equity index or other factors. The applicable prospectus supplement will contain information as to how we will determine the amount of principal or interest payable on any date, as well as the currencies, commodities, equity indices or other factors to which the amount payable on that date relates and certain additional tax considerations.

Rights

We may issue rights to purchase our securities. The rights may or may not be transferable by the persons purchasing or receiving the rights. In connection with any rights offering, we may enter into a standby underwriting or other arrangement with one or more underwriters or other persons pursuant to which such underwriters or other persons would purchase any offered securities remaining unsubscribed for after such rights offering. Each series of rights will be issued under a separate rights agent agreement to be entered into between us and one or more banks, trust companies or other financial institutions, as rights agent, that we will name in the applicable prospectus supplement. The rights agent will act solely as our agent in connection with the rights and will not assume any obligation or relationship of agency or trust for or with any holders of rights certificates or beneficial owners of rights.

The prospectus supplement relating to any rights that we offer will include specific terms relating to the offering, including, among other matters:

the date of determining the security holders entitled to the rights distribution;

the aggregate number of rights issued and the aggregate amount of securities purchasable upon exercise of the rights;

the exercise price;

the conditions to completion of the rights offering;

the date on which the right to exercise the rights will commence and the date on which the rights will expire; and

any applicable federal income tax considerations.

Each right would entitle the holder of the rights to purchase for cash the principal amount of securities at the exercise price set forth in the applicable prospectus supplement. Rights may be exercised at any time up to the close of business on the expiration date for the rights provided in the applicable prospectus supplement. After the close of business on the expiration date, all unexercised rights will become void.

If less than all of the rights issued in any rights offering are exercised, we may offer any unsubscribed securities directly to persons other than our security holders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby arrangements, as described in the applicable prospectus supplement.

Transfer Agent and Registrar

American Stock Transfer & Trust Company is the transfer agent and registrar for our common stock.

Listing

Our common stock is listed on the Nasdaq Capital Market under the trading symbol BDSI.

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PLAN OF DISTRIBUTION

We may sell the securities from time to time pursuant to underwritten public offerings, direct sales to the public, negotiated transactions, block trades or a combination of these methods. We may sell the securities to or through underwriters or dealers, through agents, or directly to one or more purchasers. We may distribute securities from time to time in one or more transactions:

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

A prospectus supplement or supplements will describe the terms of the offering of the securities, including, to the extent applicable:

- the terms of the offering;
- the name or names of the underwriters, if any;
- the purchase price of the securities or other consideration therefor, and the proceeds, if any, 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 other items constituting agents or underwriters compensation;
- any public offering price;
- any discounts or concessions allowed or re-allowed or paid to dealers; and
- any securities exchange or market on which the securities may be listed.

Only underwriters named in the prospectus supplement will be underwriters of the securities offered by the prospectus supplement.

If underwriters are used in the sale, they will acquire the securities for their own account and may resell the securities from time to time in one or more transactions at a fixed public offering price or at varying prices determined at the time of sale. The obligations of the underwriters to purchase the securities will be subject to the conditions set forth in the applicable underwriting agreement. We may offer the securities to the public through underwriting syndicates represented by managing underwriters or by underwriters without a syndicate. Subject to certain conditions, the underwriters will be obligated to purchase all of the securities offered by the prospectus supplement, other than securities covered by any over-allotment option. Any public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may change

from time to time. We may use underwriters with whom we have a material relationship. We will describe in the prospectus supplement, naming the underwriter, the nature of any such relationship.

We may sell securities directly or through agents we designate from time to time. We will name any agent involved in the offering and sale of securities, and we will describe any commissions we will pay the agent in the prospectus supplement. Unless the prospectus supplement states otherwise, our agent will act on a best-efforts basis for the period of its appointment.

We may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us at the public offering price set forth in the prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we must pay for solicitation of these contracts in the prospectus supplement.

We may also make sales through the Internet or through other electronic means. Since we may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet or other forms of electronic bidding or ordering systems for the pricing and allocation of such securities, you will want to pay particular attention to the description of that system we will provide in a prospectus supplement.

Such electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which such securities are sold. These bidding or ordering systems may present to each bidder, on a so-called real-time basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder s individual bids would be accepted, prorated or rejected. For example, in the case of debt security, the clearing spread could be indicated as a number of basis points above an index treasury note. Of course, many pricing methods can and may also be used.

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Upon completion of such an electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders would be based in whole or in part on the results of the Internet or other electronic bidding process or auction.

We may provide agents and underwriters with indemnification against civil liabilities, including liabilities under the Securities Act of 1933, as amended, or contribution with respect to payments that the agents or underwriters may make with respect to these liabilities. Agents and underwriters may engage in transactions with, or perform services for, us in the ordinary course of business.

All securities we may offer, other than common stock, will be new issues of securities with no established trading market. Any underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We cannot guarantee the liquidity of the trading markets for any securities.

Any underwriter may engage in over-allotment, stabilizing transactions, short-covering transactions and penalty bids in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum price. Syndicate-covering or other short-covering transactions involve purchases of the securities, either through exercise of the over-allotment option or in the open market after the distribution is completed, to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a stabilizing or covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of the activities at any time.

Any underwriters or agents that are qualified market makers on The NASDAQ Capital Market may engage in passive market making transactions in the common stock on The NASDAQ Capital Market in accordance with Regulation M under the Exchange Act, during the business day prior to the pricing of the offering, before the commencement of offers or sales of our common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker s bid, however, the passive market maker s bid must then be lowered when certain purchase limits are exceeded. Passive market making may stabilize the market price of the securities at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by this prospectus, and any supplement thereto, will be passed upon for us by Ellenoff Grossman & Schole LLP, New York, New York. The legality of the securities for any underwriters, dealers or agents will be passed upon by counsel as may be specified in the applicable prospectus supplement.

EXPERTS

The financial statements and management s assessment of the effectiveness of internal control over financial reporting (which is included in Management s Report on Internal Control over Financial Reporting) incorporated in this Prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2012 have been so incorporated in reliance on the report of Cherry Bekaert LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement with the Securities and Exchange Commission under the Securities Act of 1933, as amended, with respect to the shares of our common stock offered by this prospectus. This prospectus is part of that registration statement and does not contain all the information included in the registration statement.

For further information with respect to our common stock and us, you should refer to the registration statement, its exhibits and the material incorporated by reference therein. Portions of the exhibits have been omitted as permitted by the rules and regulations of the Securities and Exchange Commission. Statements made in this prospectus as to the contents of any contract, agreement or other document referred to are not necessarily complete. In each instance, we refer you to the copy of the contracts or other documents filed as an exhibit to the registration statement, and these statements are hereby qualified in their entirety by reference to the contract or document.

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The registration statement may be inspected and copied at the public reference facilities maintained by the Securities and Exchange Commission at Room 1024, Judiciary Plaza, 100 F Street, N.E., Washington, D.C. 20549 and the Regional Offices at the Commission located in the Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661, and at 233 Broadway, New York, New York 10279. Copies of those filings can be obtained from the Commission s Public Reference Section, Judiciary Plaza, 100 F Fifth Street, N.E., Washington, D.C. 20549 at prescribed rates and may also be obtained from the web site that the Securities and Exchange Commission maintains at http://www.sec.gov. You may also call the Commission at 1-800-SEC-0330 for more information. We file annual, quarterly and current reports and other information with the Securities and Exchange Commission. You may read and copy any reports, statements or other information on file at the Commission s public reference room in Washington, D.C. You can request copies of those documents upon payment of a duplicating fee, by writing to the Securities and Exchange Commission.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

We are incorporating by reference certain documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in the documents incorporated by reference is considered to be part of this prospectus supplement. Statements contained in documents that we file with the SEC and that are incorporated by reference in this prospectus supplement will automatically update and supersede information contained in this prospectus supplement, including information in previously filed documents or reports that have been incorporated by reference in this prospectus supplement, to the extent the new information differs from or is inconsistent with the old information. We have filed or may file the following documents with the SEC and they are incorporated herein by reference as of their respective dates of filing:

Our Annual Report on Form 10-K for the fiscal year ended December 31, 2012, as filed with the SEC on March 18, 2013;

Our Current Report on Form 8-K, as filed with the SEC on January 22, 2013;

Our Current Report on Form 8-K, as filed with the SEC on February 28, 2013;

Our Current Report on Form 8-K, as filed with the SEC on March 19, 2013;

Our Current Report on Form 8-K, as filed with the SEC on April 1, 2013;

Our Current Report on Form 8-K, filed with the SEC on April 29, 2013;

Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, as filed with the SEC on May 9, 2013;

Our Current Report on Form 8-K, as filed with the SEC on May 9, 2013;

Our Current Report on Form 8-K, as filed with the SEC on June 10, 2013;

Our Proxy Statement on Schedule 14A, as filed with the SEC on June 12, 2013;

Our Current Report on Form 8-K, as filed with the SEC on July 11, 2013;

Our Current Report on Form 8-K, as filed with the SEC on July 19, 2013;

Our Current Report on Form 8-K, as filed with the SEC on July 29, 2013;

Our Current Report on Form 8-K, as filed with the SEC on August 1, 2013;

Our Quarterly Report on Form 10-Q for the quarter and six months ended June 30, 2013, as filed with the SEC on August 9, 2013;

Our Current Report on Form 8-K, as filed with the SEC on August 9, 2013;

Our Current Report on Form 8-K, as filed with the SEC on September 4, 2013;

Our Current Report on Form 8-K, as filed with the SEC on October 9, 2013;

Our Current Report on Form 8-K, as filed with the SEC on October 23, 2013;

Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2013, as filed with the SEC on November 12, 2013;

Our Current Report on Form 8-K, as filed with the SEC on November 13, 2013;

Our Current Report on Form 8-K, as filed with the SEC on December 2, 2013;

The description of our common stock contained in our Form 8-A filed on June 19, 2002, as amended June 20, 2002, and as it may be further amended from time to time; and

All documents filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement and before the termination or completion of this offering of common stock shall be deemed to be incorporated by reference in this prospectus supplement and to be a part of it from the filing dates of such documents, except in each case for information contained in any such filing where we indicate that such information is being furnished and is not to be considered filed under the Securities Exchange Act of 1934, as amended.

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You may request a copy of these filings at no cost (other than exhibits unless such exhibits are specifically incorporated by reference) by writing or telephoning us at the following address and telephone number:

BioDelivery Sciences International, Inc.

801 Corporate Center Drive, Suite 210

Raleigh, North Carolina 27607

Telephone: (813) 864-2562

Attention: James A. McNulty

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$75,000,000

Common Stock
Debt Securities
Rights

Preferred Stock
Warrants
Units

Prospectus

December 18, 2013