

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

Amendment No.1
to
FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

BACTERIN INTERNATIONAL HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware

*(State or other jurisdiction of
incorporation or organization)*

3841

*(Primary Standard Industrial
Classification Code Number)*

20-5313323

*(I.R.S. Employer
Identification Number)*

**600 Cruiser Lane
Belgrade, Montana 59714
(406) 388-0480**

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

**John P. Gandolfo
Chief Financial Officer
600 Cruiser Lane
Belgrade, Montana 59714
(406) 388-0480**

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

Copies to:

**Jill Gilpin
Exemplar Law LLC
115 Broad Street, 5th Floor
Boston, MA 02110
(617) 542-7400**

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

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

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

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

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

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

Large accelerated filer	£	Accelerated filer	£
Non-accelerated filer	£ (Do not check if a smaller reporting company)	Smaller reporting company	<input checked="" type="checkbox"/>

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)(2)	Proposed Maximum Offering Price Per Share (3)	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.000001 par value per share	11,250,597	\$ 5.75	\$ 64,345,467	\$ 4,587.83(4)

(1) Pursuant to Rule 416 under the Securities Act, this registration statement also covers an indeterminate number of additional shares as may be issued as a result of adjustments by reason of any stock split, stock dividend, or similar transaction.

(2) Such shares are being registered for resale from time to time by certain selling stockholders and include 4,126,630 shares issuable upon the exercise of warrants.

(3) Estimated pursuant to Rule 457(c) solely for the purpose of calculating the amount of the registration fee based upon the average of the bid and asked prices of the registrant's common stock on December 2, 2010 as reported on the OTCBB and OTCQB Marketplace.

(4) \$6,273.10 previously paid

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

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

SUBJECT TO COMPLETION, DATED DECEMBER 7, 2010

PROSPECTUS

11,250,597 Shares



Common Stock

The stockholders of Bacterin International Holdings, Inc. listed in this prospectus are offering for sale up to 11,250,597 shares of common stock, which includes up to 4,126,630 shares of common stock issuable upon the exercise of warrants.

We expect that sales made pursuant to this prospectus will be made

- in broker's transactions;
- in block trades on the OTCBB and OTCQB Marketplace;
- in transactions directly with market makers; or
- in privately negotiated sales or otherwise.

We will not receive any of the proceeds of sales by the selling stockholders. We will pay the expenses incurred to register the shares for resale, but the selling stockholders will pay any underwriting discounts, concessions, or brokerage commissions associated with the sale of their shares of common stock.

The selling stockholders will determine when they will sell their shares, and in all cases they will sell their shares at the current market price or at negotiated prices at the time of the sale. Securities laws and SEC regulations may require the selling stockholders to deliver this prospectus to purchasers when they resell their shares of common stock.

Our common stock is listed on the OTCBB and OTCQB Marketplace under the symbol "BIHI.OB." On December 2, 2010, the last reported asked price of our common stock on the OTCBB and OTCQB Marketplace was \$6.40 per share.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 4 of this prospectus for a discussion of information that should be considered in connection with an investment in our common stock.

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 _____, 2010

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You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. The selling stockholders are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of our common stock.

PROSPECTUS SUMMARY

This summary highlights certain information appearing elsewhere in this prospectus. For a more complete understanding of this offering, you should carefully read the entire prospectus and the registration statement of which this prospectus is a part, including the risk factors and the financial statements. Unless the context otherwise requires, “we,” “our,” “us,” “our company” and similar expressions used in this prospectus refer to Bacterin International, Inc., a Nevada corporation, or Bacterin, prior to the closing of the Reverse Merger, as defined below, on June 30, 2010, and Bacterin International Holdings, Inc., f/k/a K-Kitz, Inc., a Delaware corporation, or the Company, as successor to the business of Bacterin, following the closing of the Reverse Merger transaction.

Bacterin International Holdings, Inc.

We develop, manufacture and market biologics products to domestic and international markets through our biologics division. Our products are used in a variety of applications including enhancing fusion in spine surgery, relief of back pain with a facet joint stabilization, promotion of bone growth in foot and ankle surgery, promotion of skull healing following neurosurgery and subcondral bone defect repair in knee and other joint surgeries.

Our medical devices division develops medical devices intended for use in several diverse clinical areas including orthopedic, plastic, and cardiovascular surgery. Our background and expertise is in the research, testing, and development of coatings for medical devices, particularly antimicrobial-based coatings.

The manufacturing and operations of the biologics and device divisions are organized separately while products from both are marketed through several channels including independent distributors, joint development projects and our direct sales network which we began to implement in the last half of 2009. To date, we have established 13 regions with a regional vice-president in charge of all activities within the region and have hired and trained 52 sales representatives. Our customers are located worldwide, with approximately 97% of our third quarter 2010 sales being derived from customers located in the United States. Our headquarters, laboratory and manufacturing facilities are located in Belgrade, Montana.

Recent Developments

On June 30, 2010, we completed a reverse merger transaction, or the Reverse Merger, in which we caused Bacterin to be merged with and into a wholly-owned Nevada subsidiary created for purposes of effecting the Reverse Merger, and the stockholders of Bacterin obtained control of the Company. The Reverse Merger was consummated under Nevada corporate law pursuant to an Agreement and Plan of Merger, dated as of June 30, 2010. As a result of the Reverse Merger, Bacterin became our wholly owned subsidiary and we are now engaged, through Bacterin, in the business of biomaterials research, development, and commercialization.

Pursuant to the terms of the Reverse Merger, the stockholders of Bacterin immediately preceding the Reverse Merger received one share of the Company’s common stock for each two shares of Bacterin common stock such stockholder held prior to the Reverse Merger with the aggregate number of the Company’s shares of common stock so issued to the Bacterin stockholders, being 28,257,133 shares (after rounding down fractional shares), representing approximately 96% of our outstanding common stock as of the closing of the Reverse Merger on June 30, 2010, prior to taking into account the issuance of any shares of our common stock pursuant to the private placement described below. The remaining 4% of our common stock, or 1,180,596 shares, remained with the predecessor company’s shareholders, and the holders of 180,596 of those shares are included as selling stockholders in this registration statement.

Before the Reverse Merger, our corporate name was K-Kitz, Inc., and our trading symbol was KKTZ.OB. On June 29, 2010, we changed our corporate name to “Bacterin International Holdings, Inc.” which name change became effective for trading purposes on July 1, 2010. Effective July 21, 2010, our trading symbol was changed from KKTZ.OB to BIHI.OB.

Concurrently with the closing of the Reverse Merger, we completed an initial closing of a private placement to selected qualified investors of shares of our common stock at a purchase price of \$1.60 per share and detachable warrants to purchase one-quarter share of our common stock for each share of our common stock purchased in the private placement (at an exercise price of \$2.50 per share). In total, we sold 4,934,533 shares of our common stock and warrants to purchase 1,233,646 shares of common stock as part of this initial closing. We received gross proceeds of \$7,508,329 in consideration for the sale of the shares of common stock and warrants, which consisted of (i) \$4,026,000 in cash from investors in the private placement and (ii) \$3,482,329 from note holders in two earlier Bacterin bridge financings (conducted to fund working capital and capital expenditures during the months prior to the Reverse Merger) who converted their outstanding principal and interest into the private placement at a 10% discount to the purchase price, being \$1.44 per share, and received identical warrant coverage as the cash investors except that the exercise price of the converting note holders' warrants is \$2.25 per share, a 10% discount to the exercise price of the warrants received by the cash investors. The note holders in the bridge financings also received warrants to purchase 1,482,256 shares of our common stock and our placement agent received warrants to purchase 328,125 shares of our common stock as part of our bridge financing.

In the second and final closing of this private placement on July 30, 2010, we sold a total of 1,102,500 additional shares of our common stock together with additional warrants to purchase an aggregate of 275,625 shares of our common stock for total gross cash proceeds of \$1,764,000.

Our placement agents received an aggregate of \$463,200 in cash fees in connection with the private placement (\$322,080 from the initial closing and \$141,120 from the second and final closing) and were reimbursed for their out-of-pocket expenses. In addition, the placement agents received an aggregate of 106,217 shares of our common stock (84,167 shares from the initial closing and 22,050 shares from the second and final closing) and warrants to purchase 361,875 shares of our common stock (251,625 shares from the initial closing and 110,250 shares from the second and final closing) at an exercise price of \$1.60 per share.

Following the private placement transaction, the Company has permitted an additional \$400,000 in principal amount outstanding from the Bacterin bridge financings to convert into 280,411 shares of the Company's common stock and warrants to purchase 70,103 shares of the Company's common stock on the same terms as if such debt had actually converted in the private placement transaction. All other outstanding debt from those bridge financings that did not convert has been repaid.

In connection with the closing of the Reverse Merger, the Company repurchased 4,319,404 shares of its common stock from one of its stockholders for aggregate consideration of \$100, as well as certain other good and valuable consideration, and Bacterin repurchased 77,029 shares of its common stock from certain of its stockholders for aggregate consideration of \$123,245. Immediately after these repurchases, all of these shares were cancelled.

On August 6, 2010, we paid certain of Bacterin's former stockholders, who held approximately 743,940 shares of Bacterin common stock in the aggregate (or the equivalent of 371,970 shares of our common stock post-Reverse Merger), the fair value for such shares in connection with the exercise of their dissenters' rights. As a result, and pursuant to the terms of the agreement governing the Reverse Merger, the former Bacterin stockholders (excluding the dissenting shareholders) are entitled to be issued 371,970 shares of our common stock (*i.e.*, the same number of shares that the dissenting stockholders would have received had they not exercised their dissenters rights) in proportion to such stockholders' pre-Reverse Merger share holding percentages in Bacterin.

On November 19, 2010, the Company entered into financing arrangement with two subsidiaries of Western Technology Investment ("WTI"), whereby WTI, through its subsidiaries, agreed to provide a credit facility which allows the Company to draw down \$2.5 million initially, and gives the Company the ability to draw down an additional \$2.5 million through April 30, 2011 provided the Company has achieved 90% of performance based milestones for the next two quarters. In addition, upon the mutual agreement of Bacterin and WTI, WTI has agreed to an additional commitment through December 31, 2011 of up to 25% of the next new round of equity financing or up to \$3.0 million. The credit facility is secured by the Company's personal property and carries an all-in interest rate of 12.5%. Repayment of the initial \$2.5 million will be interest only for the first six months, with principal and interest for the subsequent 30 months. The WTI facility also allows the company to obtain separate accounts receivable financing. In connection with the financing, WTI also received warrants to purchase up to 375,000 shares of the Company's common stock. The warrants have an exercise price of the lower of \$4.00 per share or the price at which shares of the Company's stock are sold in the next qualified financing, if applicable prior to the date of exercise. The WTI warrants expire on April 30, 2018. WTI also has the right to receive additional warrants to purchase 125,000 shares of the Company's common stock at the same exercise price if the Company draws down the second \$2.5 million tranche of the facility.

The Company also issued warrants to purchase a total of 489,710 shares of the Company's common stock to a limited group of existing investors who exercised existing warrants. The new warrants have an exercise price of \$4.00 per share and expire on the fifth anniversary of the date of issuance. The Company received a total of \$1,111,374 from the cash payments of the exercise price of the existing warrants.

The Company also issued 30,000 shares to a former executive in connection with a settlement agreement and converted the former executive's stock options to an equivalent number of warrants.

Our Offices

Our executive offices are located at 600 Cruiser Lane, Belgrade, Montana 59714 and our telephone number is (406) 388-0480. Our website is located at www.bacterin.com. The information contained on our website does not constitute part of this prospectus.

Through our website, we make available free of charge our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934. These reports are available as soon as reasonably practicable after we electronically file those materials with the Securities and Exchange Commission, or SEC. When available, we also expect to post on our website investor presentations and webcast earnings calls and transcripts, in addition to the charters of our committees of our Board of Directors; our Corporate Governance Guidelines, our Code of Ethics, and any amendments or waivers thereto; and any other corporate governance materials contemplated by SEC regulations. The documents are available in print by contacting our corporate secretary at our executive offices.

The Offering

Common stock offered by the selling stockholders

11,250,597 shares, which includes up to 4,126,630 shares of common stock issuable upon the exercise of warrants.

Use of proceeds

We will not receive any of the proceeds of sales of common stock by the selling stockholders. To the extent we receive any proceeds from the exercise of warrants by the selling stockholders, we expect to use such proceeds for working capital and other general corporate purposes. However, such warrants contain a “cashless” exercise provision, so there can be no assurance that we will receive any proceeds upon the exercise of warrants.

Risk factors

See “Risk Factors” and other information included in this prospectus for a discussion of factors that you should consider before deciding to invest in shares of our common stock.

OTCBB and OTCQB Marketplace Symbol

BIHI.OB

RISK FACTORS

Before you invest in our common stock, you should be aware that there are risks, including those set forth below. You should carefully consider these risk factors, together with all the other information included in this prospectus, before you decide to purchase shares of our common stock.

Risks Related to Our Business and Our Industry

Our products are relatively new and long-term results are incomplete, thus, the future of our business still remains uncertain.

Many of our current products are relatively new and have been in use for a relatively short period of time. See “Business - Products and Services.” The results of the use of these products will be monitored for many years. While preliminary results have been good, there can be no assurance that any or all of these products will perform well over longer periods of time. Future product issues may expose us to legal actions, removal of regulatory approvals or products being pulled from use. If we become subject to product or general liability or errors and omissions claims, they could be time-consuming and costly. The U.S. Food and Drug Administration, or the FDA, and foreign regulatory authorities may impose significant restrictions on the use or marketing of our products or impose additional requirements. Later discovery of previously unknown problems with any of these products or their manufacture may result in further restrictions, including withdrawal of the product from the market. Any such restrictions or withdrawals could materially affect our ability to execute our business plan. In addition, governmental authorities could seize our inventory of products, or force us to recall any product already in the market if we fail to comply with FDA or other governmental regulations.

Many competitive products exist and more will be developed, and we may not be able to successfully compete because we are smaller and have fewer financial resources.

Our business is in a very competitive and evolving field. Rapid new developments in this field have occurred over the past few years, and are expected to continue to occur. Other companies already have competing products available or about to be available or may develop products to compete with ours.

Many of these products may have short regulatory timeframes and our competitors, many with more substantial development resources, may be able to develop competing products that are equal to or better than ours. This may make our products obsolete or undesirable by comparison and reduce our revenue. Our success will depend, in large part, on our ability to maintain a competitive position concerning our intellectual property, and to develop new technologies and new applications for our technologies. Many of our competitors have substantially greater financial and technical resources, as well as greater production and marketing capabilities, than us.

The medical community and the general public may perceive synthetic materials and growth factors as safer, which could have a material adverse effect on our business.

Members of the medical community and the general public may perceive synthetic materials and growth factors as safer than our allograft-based bone tissue products.

Our products may be incapable of competing successfully with synthetic bone graft substitutes and growth factors developed and commercialized by others, which could have a material adverse effect on our business, financial condition and results of operations.

Negative publicity concerning methods of human tissue recovery and screening of donor tissue in the industry in which we operate may reduce demand for our allografts and impact the supply of available donor tissue.

Media reports or other negative publicity concerning both improper methods of tissue recovery from donors and disease transmission from donated tissue may limit widespread acceptance of our allografts. Unfavorable reports of improper or illegal tissue recovery practices, both in the United States and internationally, as well as incidents of improperly processed tissue leading to transmission of disease, may broadly affect the rate of future tissue donation and market acceptance of allograft technologies. Potential patients may not be able to distinguish our allografts, technologies and the tissue recovery and the processing procedures from those of our competitors or others engaged in tissue recovery. In addition, families of potential donors may become reluctant to agree to donate tissue to for-profit tissue processors.

We are highly dependent on the availability of human donors; any disruptions could cause our customers to seek alternative providers or technologies.

We are highly dependent on our ability to obtain donor cadavers as the raw material for many of our products. The availability of acceptable donors is relatively limited and we compete with many other companies for this limited availability. The availability of donors is also impacted by regulatory changes, general public opinion of the donor process and our reputation for our handling of the donor process. In addition, due to seasonal changes in the mortality rates, some scarce tissues are at times in short supply. Any disruption in the supply of this crucial raw material could have significant consequences for our revenue, operating results and continued operations. See “Business - Donor Procurement.”

We will need to continue to innovate and develop new products to be desirable to our customers.

The markets for our products and services are characterized by rapid technological change, frequent new introductions, changes in customers’ demands and evolving industry standards. Accordingly, we will need to continue to innovate and develop additional products. These efforts can be costly, subject to long development and regulatory delays and may not result in products approved for sale. These costs may hurt operating results and may require additional capital. If additional capital is not available, we may be forced to curtail development activities. In addition, any failure on our behalf to react to changing market conditions could create an opportunity for other market participants to capture a critical share of the market within a short period of time.

Our success will depend on our ability to engage and retain qualified technical personnel who are difficult to attract.

Our success will depend on our ability to attract and retain qualified technical personnel to assist in research and development, testing, product implementation, low-scale production and technical support. Competition for qualified technical personnel is intense, and we may encounter difficulty in engaging and retaining qualified personnel needed to implement our growth plan. The demand for such personnel is high and the supply of qualified technical personnel is limited. A significant increase in the wages paid by competing employers could result in a reduction of our technical work force and increases in the wage rates that we must pay or both. If either of these events were to occur, our cost structure could increase and our growth potential could be impaired.

Loss of key members of our management who we need to succeed could adversely affect our business.

We are highly dependent on the services of Guy Cook, our President and Chief Executive Officer, and other key members of our management team and the loss of his or any of their services could have an adverse effect on our future operations. See “Management.” We do not currently maintain a key-man life insurance policy insuring the life of Mr. Cook or any other member of our management team.

We are highly dependent on the continued availability of our facilities and would be harmed if they were unavailable for any prolonged period of time.

Any failure in the physical infrastructure of our facilities or services could lead to significant costs and disruptions that could reduce our revenues and harm our business reputation and financial results. We are highly reliant on our Belgrade, Montana facilities. See “Business - Facilities.” Any natural or man-made event that impacts our ability to utilize these facilities could have a significant impact on our operating results, reputation and ability to continue operations. The regulatory process for approval of facilities is time-consuming and our ability to rebuild facilities would take a considerable amount of time and expense and cause a significant disruption in service to our customers. Further, the FDA or some other regulatory agency could identify deficiencies in future inspections of our facilities or our supplies that could disrupt our business, reducing profitability. We carry business interruption insurance of up to \$1 million per location to help in these instances, but it may not cover all costs or our standing in the market.

We will be required to invest in facilities and equipment on a continuing basis, which will put pressure on us to finance these investments.

We have invested, and intend to continue to invest, in facilities and state-of-the-art equipment in order to increase, expand or update our capabilities and facilities. See “Business - Facilities.” Changes in technology or sales growth beyond currently established production capabilities, which we anticipate, will require further investment. We currently anticipate that we will need to spend between \$4 and \$5 million over the next five years in order to increase, expand or update our existing facilities to meet our expected growth over that period. However, there can be no assurance that we will generate sufficient funds from operations to maintain our existing facilities and equipment or to finance any required capital investments or that other sources of funding will be available. Additionally, there can be no guarantee that any future expansion will not negatively affect earnings.

Future revenue will depend on our ability to develop new sales channels and there can be no assurance that these efforts will result in significant sales.

We are in the process of developing sales channels for our products but there can be no assurance that these channels can be developed or that we will be successful in selling our products. We currently sell our products through direct sales by our employees and indirectly through distributor relationships. We are engaging in a major initiative to build and further expand our direct sales force. See “Business - Sales and Marketing.” This effort will have significant costs that will be incurred prior to the generation of revenue sufficient to cover these costs. In 2010, we incurred sales and marketing expenses of approximately \$8 million. The costs incurred for these efforts may impact our operating results and there can be no assurance of their effectiveness. Many of our competitors have well-developed sales channels and it may be difficult for us to break through these competitors to take market share. If we are unable to develop these sales channels, we may not be able to grow revenue or maintain our current level of revenue generation.

There may be fluctuations in our operating results, which will impact our stock price.

Significant annual and quarterly fluctuations in our results of operations may be caused by, among other factors, our volume of revenues, the timing of new product or service announcements, releases by us and our competitors in the marketplace of new products or services, and general economic conditions. There can be no assurance that the level of revenues and profits, if any, achieved by us in any particular fiscal period will not be significantly lower than in other comparable fiscal periods. Our expense levels are based, in part, on our expectations as to future revenues. As a result, if future revenues are below expectations, net income or loss may be disproportionately affected by a reduction in revenues, as any corresponding reduction in expenses may not be proportionate to the reduction in revenues.

We are dependent on the ability of our licensees and development partners for obtaining regulatory approvals and market acceptance of their products, for which we may have no control.

A large part of our success will depend on our ability, or that of our licensees, to obtain timely regulatory approval for products employing our technology. Moreover, our success will also depend on whether, and how quickly, our licensees gain market acceptance of products incorporating our technology, compared to competitors using competing technologies.

Our revenues will depend upon prompt and adequate reimbursement from public and private insurers and national health systems.

Political, economic and regulatory influences are subjecting the healthcare industry in the United States to fundamental change. The ability of hospitals to pay fees for allograft bone tissue products depends in part on the extent to which reimbursement for the costs of such materials and related treatments will continue to be available from governmental health administration authorities, private health coverage insurers and other organizations. We may have difficulty gaining market acceptance for our products if government and third-party payors do not provide adequate coverage and reimbursement to hospitals. Major third-party payors of hospital services and hospital outpatient services, including Medicare, Medicaid and private healthcare insurers, annually revise their payment methodologies, which can result in stricter standards for reimbursement of hospital charges for certain medical procedures or the elimination of reimbursement. Further, Medicare, Medicaid and private healthcare insurer cutbacks could create downward price pressure on our products.

Our operating results will be harmed if we are unable to effectively manage and sustain our future growth.

We might not be able to manage our future growth efficiently or profitably. Our business is unproven on a large scale and actual revenue and operating margins, or revenue and margin growth, may be less than expected. If we are unable to scale our production capabilities efficiently, we may fail to achieve expected operating margins, which would have a material and adverse effect on our operating results. Growth may also stress our ability to adequately manage our operations, quality of products, safety and regulatory compliance. If growth significantly decreases our reserves, we may be required to obtain additional financing, which may increase our indebtedness or result in dilution to our stockholders. Further, there can be no assurance that we would be able to obtain any additional financing.

Future business combinations or acquisitions may be difficult to integrate and cause our attention to be diverted.

We may pursue various business combinations with other companies or strategic acquisitions of complementary businesses, product lines or technologies. There can be no assurance that such acquisitions will be available at all, or on terms acceptable to us. These transactions may require additional financing which may increase our indebtedness or outstanding shares, resulting in dilution to stockholders. The inability to obtain such future financing may inhibit our growth and operating results. Integration of acquisitions or additional products can be time consuming, difficult and expensive and may significantly impact operating results. Furthermore, the integration of any acquisition may divert management's time and resources from our core business. We may sell some or all of our product lines to other companies or may agree to combine with another company. Selling some of our product lines may inhibit our ability to generate positive operating results going forward. While we, from time to time, evaluate potential acquisitions of businesses, products and technologies, and anticipate continuing to make these evaluations, we have no present understandings, commitments or agreements with respect to any acquisitions.

We may be subject to future product liability litigation that could be expensive and our insurance coverage may not be adequate in a catastrophic situation.

Although we are not currently subject to any product liability proceedings, and we have no reserves for product liability disbursements, we may incur material liabilities relating to product liability claims in the future, including product liability claims arising out of the usage of our products. We currently carry product liability insurance of up to \$10 million at an annual premium cost of approximately \$140,000, however, our insurance coverage and any reserves we may maintain in the future for product related liabilities may not be adequate and our business could suffer material adverse consequences.

We may implement a product recall or voluntary market withdrawal due to product defects or product enhancements and modifications, which would significantly increase our costs.

The manufacturing and marketing of our biologic products, medical devices and coating technologies involves an inherent risk that our products may prove to be defective. In that event, we may voluntarily implement a recall or market withdrawal or may be required to do so by a regulatory authority. A recall of one of our products, or a similar product manufactured by another manufacturer, could impair sales of the products we market as a result of confusion concerning the scope of the recall or as a result of the damage to our reputation for quality and safety.

Risks Related to the Regulatory Environment in which We Operate

U.S. governmental regulation could restrict the use of our products or our procurement of tissue.

In the United States, the procurement and transplantation of allograft bone tissue is subject to federal law pursuant to the National Organ Transplant Act, or NOTA, a criminal statute which prohibits the purchase and sale of human organs used in human transplantation, including bone and related tissue, for "valuable consideration." NOTA permits reasonable payments associated with the removal, transportation, processing, preservation, quality control, implantation and storage of human bone tissue. We provide services in all of these areas in the United States, with the exception of removal and implantation, and receive payments for all such services. We make payments to certain of our clients and tissue banks for their services related to recovering allograft bone tissue on our behalf. If NOTA is interpreted or enforced in a manner which prevents us from receiving payment for services we render or which prevents us from paying tissue banks or certain of our clients for the services they render for us, our business could be materially and adversely affected.

We are engaged through our marketing employees, independent sales agents and sales representatives in ongoing efforts designed to educate the medical community as to the benefits of our products, and we intend to continue our educational activities. Although we believe that NOTA permits payments in connection with these educational efforts as reasonable payments associated with the processing, transportation and implantation of our products, payments in connection with such education efforts are not exempt from NOTA's restrictions and our inability to make such payments in connection with our education efforts may prevent us from paying our sales representatives for their education efforts and could adversely affect our business and prospects. No federal agency or court has determined whether NOTA is, or will be, applicable to every allograft bone tissue-based material which our processing technologies may generate. Assuming that NOTA applies to our processing of allograft bone tissue, we believe that we comply with NOTA, but there can be no assurance that more restrictive interpretations of, or amendments to, NOTA will not be adopted in the future which would call into question one or more aspects of our method of operations.

Our business is subject to continuing regulatory compliance by the FDA and other authorities which is costly and could result in delays in the commercialization of our products.

As a manufacturer and marketer of medical devices, we are subject to extensive regulation by the FDA and the Center for Medicare Services of the U.S. Department of Health and Human Services and other federal governmental agencies and, in some jurisdictions, by state and foreign governmental authorities. These regulations govern the introduction of new medical devices, the observance of certain standards with respect to the design, manufacture, testing, labeling, promotion and sales of the devices, the maintenance of certain records, the ability to track devices, the reporting of potential product defects, the import and export of devices and other matters. We are facing an increasing amount of scrutiny and compliance costs as more states are implementing regulations governing medical devices, pharmaceuticals and/or biologics which affect many of our products.

Medical devices that incorporate coatings technology are subject to FDA regulation and compliance. Generally, any medical device manufacturer that wishes to incorporate our coatings technology into its products will be responsible for obtaining FDA approval for the medical devices it intends to market though we will assist in the 510(k) filing submitted by licensees. The FDA process can take several months to several years in the United States. The time required to obtain approval for international sales may be longer or shorter, depending on the laws of the particular country. There can be no assurance that our licensees will be able to obtain FDA or international approval on a timely basis. The FDA may also require the more extensive Premarket Approval Application, or PMA, process for certain products, which results, in effect, in a private license being granted to the applicant for marketing a particular medical device and requires an additional level of FDA scientific review to ensure the safety and effectiveness of such devices. Approval or clearance may place substantial restrictions on the indications for which the product may be marketed or to whom it may be marketed, warnings that may be required to accompany the product or additional restrictions placed on the sale and/or use of the product. Changes in regulations or adoption of new regulations could also cause delays in obtaining product approval. In addition, regulatory approval is subject to continuing compliance with regulatory standards, and product approval is subject to withdrawal if a licensee fails to comply with standards, or if an unforeseen event should occur concerning a product. Significant delays in obtaining product approval could have a significantly detrimental impact on our business. See "Business - Government Regulation."

Human tissues intended for transplantation have been regulated by the FDA since 1993. In May 2005, three new comprehensive regulations went into effect that address manufacturing activities associated with human cells, tissues and cellular and tissue-based products, or HCT/Ps. The first requires that companies that produce and distribute HCT/Ps register with the FDA. The second provides criteria that must be met for donors to be eligible to donate tissues and is referred to as the "Donor Eligibility" rule. The third rule governs the processing and distribution of the tissues and is often referred to as the "Current Good Tissue Practices" rule. The "Current Good Tissue Practices" rule covers all stages of allograft processing, from procurement of tissue to distribution of final allografts. Together they are designed to ensure that sound, high quality practices are followed to reduce the risk of tissue contamination and of communicable disease transmission to recipients. These regulations increased regulatory scrutiny within the industry in which we operate and have led to increased enforcement action which affects the conduct of our business. In addition, these regulations can increase the cost of tissue recovery activities. See "Business - Government Regulation."

Other regulatory entities include state agencies with statutes covering tissue banking. Regulations issued by Florida, New York, California and Maryland will be particularly relevant to our business. Most states do not currently have tissue banking regulations. However, recent incidents of allograft related infections in the industry may stimulate the development of regulation in other states. It is possible that others may make allegations against us or against donor recovery groups or tissue banks about non-compliance with applicable FDA regulations or other relevant statutes or regulations. Allegations like these could cause regulators or other authorities to take investigative or other action, or could cause negative publicity for our business and the industry in which we operate.

Our products may be subject to regulation in the EU as well should we enter that market. In the European Union, or EU, regulations, if applicable, differ from one EU member state to the next. Because of the absence of a harmonized regulatory framework and the proposed regulation for advanced therapy medicinal products in the EU, as well as for other countries, the approval process for human derived cell or tissue based medical products may be extensive, lengthy, expensive and unpredictable. Some of our products may be subject to European Union member states' regulations that govern the donation, procurement, testing, coding, traceability, processing, preservation, storage, and distribution of human tissues and cells and cellular or tissue-based products. Some EU member states have their own tissue banking regulations.

Clinical trials can be long, expensive and ultimately uncertain which could jeopardize our ability to obtain regulatory approval and market our products.

Clinical trials are required to develop products, gain market acceptance and obtain 510(k) certifications from the FDA. We have several clinical trials planned and will likely undertake future trials. These trials often take two years to execute and are subject to factors within and outside of our control. The outcome of these trials is uncertain and may have a significant impact on the success of our current and future products and future profits.

The commencement or completion of any of our clinical trials may be delayed or halted for numerous reasons, including, but not limited to, a regulatory body placing clinical trials on hold, patients not enrolling in clinical trials at the rate we expect, patients experiencing adverse side effects, third party contractors failing to perform in accordance with our anticipated schedule or consistent with good clinical practices, inclusive or negative interim trial results or our inability to obtain sufficient quantities of raw materials to produce our products. Our development costs will increase if we have material delays in our clinical trials or if we need to perform more or larger clinical trials than planned. If this occurs, our financial results and the commercial prospects for our products will be harmed and our prospects for profitability will be harmed.

Product pricing (and, therefore, profitability) is subject to regulatory control which could impact our revenue and financial performance.

The pricing and profitability of our products may become subject to control by the government and other third-party payors. The continuing efforts of governmental and other third-party payors to contain or reduce the cost of healthcare through various means may adversely affect our ability to successfully commercialize our products. In most foreign markets, the pricing and/or profitability of certain diagnostics and prescription pharmaceuticals are subject to governmental control. In the United States, we expect that there will continue to be federal and state proposals to implement similar governmental control though it is unclear which proposals will ultimately become law, if any. Changes in prices, including any mandated pricing, could impact our revenue and financial performance. See "Business - - Government Regulation."

Risks Related to Our Intellectual Property

Failure to protect our intellectual property rights could result in costly and time consuming litigation and our loss of any potential competitive advantage.

Our success will depend, to a large extent, on our ability to successfully obtain and maintain patents, prevent misappropriation or infringement of intellectual property, maintain trade secret protection, and conduct operations without violating or infringing on the intellectual property rights of third parties. See "Business - Technology and Intellectual Property." There can be no assurance that our patented and patent-pending technologies will provide us with a competitive advantage, that we will be able to develop or acquire additional technology that is patentable, or that third parties will not develop and offer technologies which are similar to ours. Moreover, we can provide no assurance that confidentiality agreements, trade secrecy agreements or similar agreements intended to protect unpatented technology will provide the intended protection. Intellectual property litigation is extremely expensive and time-consuming, and it is often difficult, if not impossible, to predict the outcome of such litigation. A failure by us to protect our intellectual property could have a materially adverse effect on our business and operating results and our ability to successfully compete in this industry.

We may not be able to obtain or protect our proprietary rights relating to our products without resorting to costly and time consuming litigation.

We may not be able to obtain, maintain and protect certain proprietary rights necessary for the development and commercialization of our products or product candidates. Our commercial success will depend in part on obtaining and maintaining patent protection on our products and successfully defending these patents against third-party challenges. Our ability to commercialize our products will also depend in part on the patent positions of third parties, including those of our competitors. The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions. Accordingly, we cannot predict with certainty the scope and breadth of patent claims that may be afforded to other companies' patents. We could incur substantial costs in litigation if we are required to defend against patent suits brought by third parties, or if we initiate suits to protect our patent rights.

In addition to the risks involved with patent protection, we also face the risk that our competitors will infringe on our trademarks. We are currently pursuing claims against two of our competitors who we believe have infringed on our trademarks.

In the first case, *Bacterin International, Inc. v. Allosource*, we claim that Allosource has infringed on our OSTEOSPONGE trademark through the use of the name ALLOSPONGE. We believe that ALLOSPONGE is deceptively similar to our OSTEOSPONGE mark, and that there would be a likelihood of confusion in the market place, which could result in lost sales for Bacterin, if Allosource continues to use the ALLOSOURCE name. We are seeking an injunction against the use of ALLOSPONGE, as well as commercial monetary damages.

In the second instance, we filed a complaint and sent a demand letter to Advanced Biologics, Inc. and Advanced Biologics, LLC, demanding that Advanced Biologics cease and desist any and all use of its "OsteoAMP Sponge" mark or any other "OSTEO" and/or "SPONGE" formative mark in connection with human allograft tissue, demineralized bone matrix, and cancellous bone products. We are currently negotiating with Advanced Biologics in an effort to resolve this matter. We believe that continued infringement would lead to a likelihood of confusion and could result in lost sales.

There can be no assurance that we will prevail in any claims we make to protect our intellectual property.

Future protection for our proprietary rights is uncertain which may impact our ability to successfully compete in our industry.

The degree of future protection for our proprietary rights is uncertain. We cannot ensure that:

- we were the first to make the inventions covered by each of our patent applications;
- we were the first to file patent applications for these inventions;
- others will not independently develop similar or alternative technologies or duplicate any of our technologies;
- any of our pending patent applications will result in issued patents;
- any of our issued patents or those of our licensors will be valid and enforceable;
- any patents issued to us or our collaborators will provide a basis for commercially viable products or will provide us with any competitive advantages or will not be challenged by third parties;
- we will develop additional proprietary technologies that are patentable;
- the patents of others will not have a material adverse effect on our business rights; or
- the measures we rely on to protect the intellectual property underlying our products may not be adequate to prevent third parties from using our technology, all of which could harm our ability to compete in the market.

Our success depends on our ability to avoid infringing on the intellectual property rights of third parties which could expose us to litigation or commercially unfavorable licensing arrangements.

Our commercial success depends in part on our ability and the ability of our collaborators to avoid infringing patents and proprietary rights of third parties. Third parties may accuse us or our collaborators of employing their proprietary technology in our products, or in the materials or processes used to research or develop our products, without authorization. Any legal action against our collaborators or us claiming damages and/or seeking to stop our commercial activities relating to the affected products, materials and processes could, in addition to subjecting us to potential liability for damages, require our collaborators or us to obtain a license to continue to utilize the affected materials or processes or to manufacture or market the affected products. We cannot predict whether we or our collaborators would prevail in any of these actions or whether any license required under any of these patents would be made available on commercially reasonable terms, if at all. If we are unable to obtain such a license, we or our collaborators may be unable to continue to utilize the affected materials or processes or manufacture or market the affected products or we may be obligated by a court to pay substantial royalties and/or other damages to the patent holder. Even if we are able to obtain such a license, the terms of such a license could substantially reduce the commercial value of the affected product or products and impair our prospects for profitability. Accordingly, we cannot predict whether or to what extent the commercial value of the affected product or products or our prospects for profitability may be harmed as a result of any of the liabilities discussed above. Furthermore, infringement and other intellectual property claims, with or without merit, can be expensive and time-consuming to litigate and can divert management's attention from our core business. We may be unable to obtain and enforce intellectual property rights to adequately protect our products and related intellectual property.

Others may claim an ownership interest in our intellectual property which could expose us to litigation and have a significant adverse effect on our prospects.

A third-party may claim an ownership interest in one or more of our patents or intellectual property. While we believe we own 100% of the right, title and interest in the patents for which we have applied and our other intellectual property, including that which we license from third parties, we cannot guarantee that a third-party will not, at some time, assert a claim or an interest in any of such patents or intellectual property. We are presently unaware of any claims or assertions by third-parties with respect to its patents or intellectual property, except that, (1) as a defense to a lawsuit we brought against Allosource for infringement of our OsteoSponge® trademark, Allosource has counterclaimed in an attempt to invalidate such mark; and (2) we, along with many companies in our industry, have been served a complaint filed by miniSURG International, Inc. alleging patent infringement. See “Business - Legal Proceedings.” A successful challenge or claim by a third party to our patents or intellectual property could have a significant adverse effect on our prospects.

The result of litigation may result in financial loss and/or impact our ability to sell our products going forward.

We will vigorously defend any future intellectual property litigation that may arise but there can be no assurance that we will prevail in these matters. An unfavorable judgment may result in a financial burden on us. An unfavorable judgment may also result in restrictions on our ability to sell certain products and therefore may impact future operating results.

Risks Related to Our Common Stock

Because we became public through a reverse merger, we may not be able to attract the attention of major brokerage firms.

There are coverage risks associated with our becoming public through a reverse merger, including, among other things, security analysts of major brokerage firms may not provide coverage of us since there is no incentive to brokerage firms to recommend the purchase of our common stock. We cannot assure you that brokerage firms will want to conduct any public offerings on our behalf in the future.

If we do not timely file and have declared effective the registration statement required pursuant to our private placement, we will be required to pay liquidated damages.

As part of our private placement, we entered into a registration rights agreement. See “Description of Securities - Registration Rights.” Under this agreement, we are obligated to file a registration statement providing for the resale of the shares of common stock acquired in the private placement and underlying the warrants by September 28, 2010. Pursuant to the agreement, we agreed to file and have declared effective this registration statement by December 27, 2010. If we do not meet this timeline, we must pay liquidated damages in the amount equal to 1% of the aggregate investment amount per month, subject to a maximum limit of 12% of the aggregate investment amount.

If and when our registration statement becomes effective, a significant number of shares of common stock will be eligible for sale, which could depress the market price of our common stock.

Following the effective date of the registration statement, a significant number of our shares of common stock will become eligible for sale in the public market, which could harm the market price of the stock. Further, shares may be offered from time to time in the open market pursuant to Rule 144, and these sales may have a depressive effect as well.

There has been no active public trading market for our common stock.

Although our common stock is traded in very limited volumes on the OTCBB and OTCQB Marketplace, there is currently no active public market for our common stock. An active trading market may not develop or, if developed, may not be sustained. The lack of an active market may impair your ability to sell your shares of common stock at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the market value and increase the volatility of your shares of common stock. An inactive market may also impair our ability to raise capital by selling shares of common stock and may impair our ability to acquire other companies or assets by using shares of our common stock as consideration.

The market price of our common stock may be volatile and may decline in value.

The market price of our common stock has been and will likely continue to be highly volatile, as is the stock market in general, and the market for OTCBB and OTCQB Marketplace quoted stocks, in particular. Some of the factors that may materially affect the market price of our common stock are beyond our control, such as changes in financial estimates by industry and securities analysts, conditions or trends in the industry in which we operate or sales of our common stock. These factors may materially adversely affect the market price of our common stock, regardless of our performance. In addition, the public stock markets have experienced extreme price and trading volume volatility. This volatility has significantly affected the market prices of securities of many companies for reasons frequently unrelated to the operating performance of the specific companies. These broad market fluctuations may adversely affect the market price of our common stock.

Our stockholders may experience significant dilution if future equity offerings are used to fund operations or acquire complementary businesses.

If our future operations or acquisitions are financed through the issuance of equity securities, our stockholders could experience significant dilution. In addition, securities issued in connection with future financing activities or potential acquisitions may have rights and preferences senior to the rights and preferences of our common stock. We also have established an equity incentive plan for our management and employees. We expect to grant options to purchase shares of our common stock to our directors, employees and consultants and we will grant additional options in the future. The issuance of shares of our common stock upon the exercise of these options may result in dilution to our stockholders.

Our current management can exert significant influence over us and make decisions that are not in the best interests of all stockholders.

Our executive officers and directors beneficially own as a group approximately 39% of our outstanding shares of common stock. As a result, these stockholders will be able to assert significant influence over all matters requiring stockholder approval, including the election and removal of directors and any change in control. In particular, this concentration of ownership of our outstanding shares of common stock could have the effect of delaying or preventing a change in control, or otherwise discouraging or preventing a potential acquirer from attempting to obtain control. This, in turn, could have a negative effect on the market price of our common stock. It could also prevent our stockholders from realizing a premium over the market prices for their shares of common stock. Moreover, the interests of the owners of this concentration of ownership may not always coincide with our interests or the interests of other stockholders and, accordingly, could cause us to enter into transactions or agreements that we would not otherwise consider.

Our common stock is considered “penny stock” and may be difficult to sell.

The SEC has adopted Rule 3a51-1, which establishes the definition of a “penny stock” for the purposes relevant to us, as any equity security that has a market price of less than \$5.00 per share or with an exercise price of less than \$5.00 per share and trades on a national market system with certain initial quantitative listing standards, subject to certain exceptions. The market price of our common stock currently is traded near \$5.00 per share, and our stock is currently listed on the OTCBB and OTCQB Marketplace, which do not have such quantitative listing standards and therefore may be designated as a “penny stock” according to SEC rules. For any transaction involving a penny stock, unless exempt, Rule 15c-9 requires:

- that a broker or dealer approve a person's account for transactions in penny stocks; and
- that the broker or dealer receives from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person's account for transactions in penny stocks, the broker or dealer must:

- obtain financial information and investment experience objectives of the person; and
- make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the SEC relating to the penny stock market, which, in highlight form:

- sets forth the basis on which the broker or dealer made the suitability determination; and
- that the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Disclosure also has to be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

Generally, brokers may be less willing to execute transactions in securities subject to the "penny stock" rules. This may make it more difficult for investors to dispose of our common stock and cause a decline in the market value of our stock. In addition, since the common stock is currently traded on the OTCBB and OTCQB Marketplace, investors may find it difficult to obtain accurate quotations of the common stock and may experience a lack of buyers to purchase such stock or a lack of market makers to support the stock price.

We do not anticipate paying dividends in the foreseeable future; you should not buy our stock if you expect dividends.

We currently intend to retain our future earnings to support operations and to finance expansion and, therefore, we do not anticipate paying any cash dividends on our common stock in the foreseeable future.

Although we have applied for trading our common stock on Nasdaq, we may not satisfy its eligibility criteria for listing and may never be listed on Nasdaq.

We have applied to list our common stock for trading on the Nasdaq Capital Market. Notwithstanding such application, no assurance can be given that we will satisfy the eligibility criteria or other initial listing requirements, or that our shares of common stock will ever be listed on Nasdaq or another national securities exchange.

We could issue "blank check" preferred stock without stockholder approval with the effect of diluting then current stockholder interests and impairing their voting rights, and provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable.

Our certificate of incorporation provides for the authorization to issue up to 5,000,000 shares of "blank check" preferred stock with designations, rights and preferences as may be determined from time to time by our board of directors. Our board of directors is empowered, without stockholder approval, to issue one or more series of preferred stock with dividend, liquidation, conversion, voting or other rights which could dilute the interest of, or impair the voting power of, our common stockholders. The issuance of a series of preferred stock could be used as a method of discouraging, delaying or preventing a change in control. For example, it would be possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of our company. In addition, advanced notice is required prior to stockholder proposals.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The statements contained in this prospectus that are not purely historical are forward-looking statements within the meaning of applicable securities laws. Our forward-looking statements include, but are not limited to, statements regarding our “expectations,” “hopes,” “beliefs,” “intentions,” or “strategies” regarding the future. In addition, any statements that refer to projections, forecasts, or other characterizations of future events or circumstances, including any underlying assumptions, are forward-looking statements. The words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “possible,” “potential,” “predict,” “project,” “should” and “would,” as well as similar expressions, may identify forward-looking statements, but the absence of these words does not mean that a statement is not forward looking. Forward-looking statements in this prospectus may include, for example, statements about:

- the future performance and market acceptance of our products;
- our ability to maintain our competitive position;
- negative media publicity;
- our ability to obtain donor cadavers for our products;
- our efforts to innovate and develop new products;
- our ability to engage and retain qualified technical personnel and members of our management team;
- our reliance on our current facilities;
- our ability to generate funds or raise capital to finance our growth;
- our efforts to expand our sales force;
- government regulations;
- fluctuations in our operating results;
- government and third-party coverage and reimbursement for our products;
- our ability to manage our growth;
- our ability to successfully integrate future business combinations or acquisitions;
- product liability claims and other litigation to which we may be subjected;
- product recalls and defects;
- timing and results of clinical trials;
- our ability to obtain and protect our intellectual property and proprietary rights;
- infringement and ownership of intellectual property;
- our ability to attract broker coverage;
- the trading market, market prices, dilution, and dividends of our common stock;
- influence by our management;
- our application for listing on Nasdaq; and
- our ability to issue preferred stock.

The forward-looking statements contained in this prospectus are based on our current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties, or assumptions, many of which are beyond our control, which may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described under the heading “Risk Factors” in this prospectus. Should one or more of these risks or uncertainties materialize, or should any of our assumptions prove incorrect, actual results may vary in material respects from those projected in these forward-looking statements. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise, except as may be required under applicable securities laws.

USE OF PROCEEDS

We will not receive any of the proceeds from sales of shares of our common stock by the selling stockholders. To the extent we receive any proceeds from the exercise of warrants by the selling stockholders, we expect to use such proceeds for working capital and other general corporate purposes. However, such warrants contain a “cashless” exercise provision, so there can be no assurance that we will receive any proceeds upon the exercise of warrants. See also “Plan of Distribution” below.

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

You should read the following discussion of our financial condition and results of operations in conjunction with our financial statements and related notes set forth in this prospectus. Unless the context otherwise requires, "we," "our," "us" and similar expressions used in this Management's Discussion and Analysis of Financial Condition and Results of Operation section refer to Bacterin prior to the closing of the Reverse Merger on June 30, 2010, and Bacterin International Holdings, Inc., f/k/a K-Kitz, Inc., as successor to the business of Bacterin, following the closing of the Reverse Merger transaction.

Overview

We develop, manufacture and market biologics products to domestic and international markets through our biologics division. Our products are used in a variety of applications including enhancing fusion in spine surgery, relief of back pain with a facet joint stabilization, promotion of bone growth in foot and ankle surgery, promotion of skull healing following neurosurgery and cartilage regeneration in knee and other joint surgeries.

Our medical devices division develops medical devices intended for use in several diverse clinical areas including orthopedic, plastic, and cardiovascular surgery. Our background and expertise is in the research, testing, and development of coatings for medical devices, particularly antimicrobial-based coatings.

The manufacturing and operations of the biologics and device divisions are organized separately while products from both are marketed through several channels including private label arrangements, independent distributors, joint development projects and our direct sales network which we began to implement in the last half of 2009. To date, we have established 13 regions with a regional vice-president in charge of all activities within the region and have hired and trained 52 sales representatives. Our customers are located worldwide, with approximately 97% of our third quarter 2010 sales being derived from customers located in the United States. Our headquarters, laboratory and manufacturing facilities are located in Belgrade, Montana.

Revenue Model

We generate revenue from a variety of sources, including the following: license fees and royalties from collaborative product development efforts with medical device manufacturers; sales from products developed and manufactured by us under our own label; products manufactured by us under private labels for other device distributing companies; and contract revenue from analytical testing and development services provided to medical device manufacturer clients, which tailor our coating process to the client's specific product/medical application. In order for us to recognize revenue from these sources, the following criteria generally must be met:

- we have entered into a legally binding agreement with the customer for the product or services;
- the products or services have been delivered by us;
- our fee for providing the products or services is fixed and determinable; and
- our fee is actually collectible.

We record revenue net of any applicable sales, use, or excise taxes. If our arrangement with the customer includes a right of acceptance or a right to cancel, revenue is recognized when our products or services are accepted or when the right to cancel has expired. We sell to certain customers under consignment arrangements. Under these arrangements, revenue is recorded on the date of sale. Revenue for research and development services provided by us is recognized based upon our meeting certain performance standards, such as incurring qualifying costs, as set forth in the specific arrangement governing the provision of such services.

Results of Operations

Comparison of Nine Months Ended September 30, 2010 and September 30, 2009

The following table sets forth key components of our results of operations during the nine months ended September 30, 2010 and 2009. The acquisition of Bacterin International Holdings, Inc. f/k/a K-Kitz, Inc. by Bacterin through the Reverse Merger was completed June 30, 2010. The combined presentation below refers to that of Bacterin International Holdings, Inc. f/k/a K-Kitz, Inc. and Bacterin.

	Nine Months Ended September 30,		Increase/ (Decrease)
	2010	2009	
Revenue			
Tissue sales	\$ 9,936,095	\$ 4,995,682	\$ 4,940,413
Royalties and other	193,424	207,554	(14,130)
Total Revenue	10,129,519	5,203,236	4,926,283
Cost of tissue sales (excluding depreciation expense presented below)	1,832,967	1,631,555	201,412
Gross Profit	8,296,552	3,571,681	4,724,871
Operating Expenses			
General and administrative	5,741,315	3,705,892	2,035,423
Sales and marketing	5,465,431	1,120,996	4,344,435
Depreciation	457,156	495,218	(38,062)
Stock Options/Restricted stock Compensation expense (excluded from general and administrative expense)	1,227,871	446,960	780,911
Total Operating Expenses	12,891,773	5,769,066	7,122,707
Loss from Operations	(4,595,221)	(2,197,385)	(2,397,836)
Other Income (Expense)			
Interest income (expense)	(680,418)	(337,303)	(343,115)
Change in warrant derivative liability	(6,826,533)	-	(6,826,533)
Other income/expense	(633,176)	11,298	(644,474)
Total Other Income (Expense)	(8,140,127)	(326,005)	(7,814,122)
Net Loss Before Benefit (Provision) for Income Taxes	(12,735,348)	(2,523,390)	(10,211,958)
Benefit (Provision) for Income Taxes			
Current	-	-	-
Deferred	-	-	-
Net Loss	\$ (12,735,348)	\$ (2,523,390)	\$ (10,211,958)

Revenue

Total revenue for the nine months ended September 30, 2010 increased 95% to \$10,129,519 compared to \$5,203,236 in the comparable prior year period. The increase of \$4,926,283 was largely the result of transitioning the sales model in the second half of 2009 from a distributor based model with a limited direct sales force to a direct sales force model.

Cost of tissue sales

Costs of tissue sales consist primarily of tissue and device manufacturing costs. Costs of tissue sales increased by 12% or \$201,412 to \$1,832,967 from \$1,631,555 for the nine months ended September 30, 2009. The increase was the result of increased costs associated with our higher sales partially offset by an inventory adjustment of the Company's biologics inventory of \$669,000 which resulted in higher cost of sales as a percentage of revenue in the third quarter of 2009. Our gross profit margin for the nine months ended September 30, 2010 was 82% compared to 69% for the comparable prior year period. Excluding the Company's above noted inventory adjustment, the Company's gross margin was 81.5% for the nine months ended September 30, 2009.

Operating Expenses

Operating expenses include general and administrative expenses, selling and marketing expenses, depreciation, research and development expenses, and compensation costs, including incentive compensation. Operating expenses increased 124%, or \$7,122,707, for the nine months ended September 30, 2010 compared to the nine months ended September 30, 2009, primarily due to the reasons set forth below.

General and Administrative

General and administrative expenses consist principally of corporate personnel compensation related costs and corporate expenses for legal, accounting and other professional fees as well as occupancy costs. General and administrative expenses increased 55%, or \$2,035,423, to \$5,741,315, for the nine months ended September 30, 2010 compared to 2009. The increase is largely associated with increased personnel costs as well as legal and professional fees incurred between the two periods.

Selling and Marketing

Selling and marketing expenses include sales based compensation expense and primarily consist of costs for trade shows, sales conventions and meetings, travel expenses, advertising and other sales and marketing related costs. Selling and marketing expenses increased 388%, or \$4,344,435, to \$5,465,431 for the nine months ended September 30, 2010 from \$1,120,996 for the comparable prior year period. As a percentage of revenue, selling and marketing expenses increased to 54% in 2010 from 22% in the prior year. The increases were primarily the result of increased commissions and travel costs associated with the larger sales force as well as a substantial increase in marketing and advertising activities in 2010 as part of our switch to a direct sales force model from a distributor based model.

Depreciation

Depreciation expense consists of depreciation of long-lived property and equipment. Depreciation expense remained relatively unchanged, decreasing to \$457,156 for the nine months ended September 30, 2010 from \$495,218 in the comparable prior year period.

Stock Options/Restricted Stock Compensation Expense

Stock options compensation expense consists of non-cash based stock compensation expense and non-cash expense associated with granting restricted stock to consultants. Stock options/restricted stock compensation expense increased \$780,911 to \$1,227,871 for the nine months ended September 30, 2010 from \$446,960 in the comparable year period. As a percentage of revenues, stock options compensation expense for the nine months ended September 30, 2010 was 12%, compared to 9% in the prior year due to the granting of restricted shares to consultants during the third quarter of 2010.

Interest Expense

Interest expense is from our promissory notes and convertible debt instruments. Interest expense for the nine months ended September 30, 2010 increased 102%, to \$680,418, as compared to the nine months ended September 30, 2009. The increase was the result of interest expense associated with the incurrence of convertible debt during the last half of 2009 and first half of 2010.

Change in Warrant Derivative Liability

For the nine months ended September 30, 2010, the Company recorded a non-cash charge of \$6,826,533 associated with the issuance of warrants as part of its convertible debt financing, based upon the closing price of the Company's common stock on September 30, 2010.

Liquidity and Capital Resources

Since our inception, we have historically financed our operations through operating cash flows, as well as the private placement of equity securities and debt, and other debt transactions. Most recently, on June 30 and July 30, 2010, we raised approximately \$9,272,000 through a private placement of equity securities and conversion of a portion of a bridge loan financing. At September 30, 2010, we had approximately \$3,133,000 of cash and cash equivalents and accounts receivables. In addition, we have access to credit lines secured by certain of our accounts receivable balances. At September 30, 2010, we had convertible notes payable of approximately \$400,000.

Net cash used in operating activities for the nine months ended September 30, 2010 was \$5,889,896. This was primarily related to cash used to fund our operations as well as an increase of accounts receivable of approximately \$1,287,420 and an increase in our inventory balance of approximately \$1,981,835. For the nine months ended September 30, 2009, net cash used in operating activities was \$2,083,645 due to a lower net loss compared to 2010 resulting from our decision to go to a direct sales effort in the second half of 2009.

Net cash provided by financing activities was \$6,839,940 and \$1,922,508 for the nine months ended September, 2010 and 2009, respectively. The net cash provided from financing activities during 2010 was primarily the result of the sale of approximately \$4,700,000 in convertible debt instruments and the issuance of \$5,095,934 of common stock, net of issuance costs, in connection with the above referenced Reverse Merger and related financing transactions. These amounts were partially offset by principal payments on outstanding loan and lease obligations.

Off Balance Sheet Arrangements

We do not have any off balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity or capital expenditures or capital resources that are material to an investor in our shares.

Cash Requirements

We believe that our cash on hand from recent private placement of equity securities, proceeds from the WTI financing and the exercise of warrants, as well as cash flow expected from operations will be sufficient to meet our anticipated cash requirements through March 31, 2011. If we do not meet our revenue objectives over that period, we may need to sell additional equity securities, which could result in dilution to our stockholders, or seek additional loans. The incurrence of indebtedness would result in increased debt service obligations and could require us to agree to operating and financial covenants that would restrict our operations. Financing may not be available in amounts or on terms acceptable to us, if at all. Any failure by us to raise additional funds on terms favorable to us, or at all, could limit our ability to expand our business operations and could harm our overall business prospects.

In addition, we currently anticipate that we will need to spend between \$4 and \$5 million over the next 5 years in order to increase, expand or update our existing facilities to meet our expected growth over that period.

Comparison of Twelve Months Ended December 31, 2009 and December 31, 2008

The following table sets forth key components of our results of operations during the twelve months ended December 31, 2009 and 2008, both in actual dollars and as a percentage of our revenue. The acquisition of Bacterin International Holdings, Inc. f/k/a K-Kitz, Inc. by Bacterin through the Reverse Merger occurred after March 31, 2010. The combined presentation below refers to that of Bacterin International Holdings, Inc. f/k/a K-Kitz, Inc. and Bacterin.

	Twelve Months Ended December 31,			
	2009		2008	
	Amount	% of Revenue	Amount	% of Revenue
Revenues				
Tissue sales	\$ 7,101,357	96.05%	\$ 8,031,611	97.80%
Royalties and other	292,136	3.95%	180,848	2.20%
Total Revenue	7,393,493	100.00%	8,212,459	100.00%
Cost of tissue sales (excluding depreciation expense presented below)	2,318,142	31.35%	1,522,658	18.54%
Gross Profit	5,075,351	68.65%	6,689,801	81.46%
Operating Expenses				
General and administrative	5,916,776	80.02%	3,750,273	45.66%
Selling and marketing	1,281,932	17.34%	429,170	5.23%
Depreciation	661,847	8.95%	646,846	7.88%
Research and development	-	0.00%	288,091	3.51%
Stock Options / Restricted Stock Compensation expense (excluded from general and administrative expense)	837,350	11.33%	460,974	5.61%
Total Operating Expenses	8,697,905	117.64%	5,575,354	67.89%
Income (Loss) from Operations	(3,622,554)	-49.00%	1,114,447	13.57%
Other Income (Expense)				
Interest income (expense)	(513,934)	-6.95%	(1,374,360)	-16.74%
Other income / expense	10,746	0.15%	20,601	0.25%
Total Other Income (Expense)	(503,188)	-6.81%	(1,353,759)	-16.48%
Net Income Before Benefit (Provision) for Income Taxes	(4,125,742)	-55.80%	(239,312)	-2.91%
Benefit (Provision) for Income Taxes				
Current	-	0.00%	-	0.00%
Deferred	-	0.00%	-	0.00%
Net Loss	\$ (4,125,742)	-55.80%	\$ (239,312)	-2.91%

Revenue

Revenue in 2009 and 2008 was comprised primarily of tissue and device sales as well as royalty payments. Total revenue decreased by 10.0% year-over-year at \$7,393,493 in 2009, compared to \$8,212,459 in 2008. The decrease was largely the result of transitioning the sales model from a distributor based model with a limited direct sales force to a direct sales force model. In addition, during 2009, we terminated an agreement with a distributor with annual sales of approximately \$3,000,000 as part of our transition to a direct sales force model.

Our largest single customers, Seaspine and Nufix, accounted for 12% and 37% of total consolidated revenues for the years ended 2009 and 2008, respectively. Our relationship with these customers was governed by a contract which identified prices for the services to be rendered and payments to be made by the customers to us. These contracts were terminated in the third quarter of 2009 when the Company migrated to a direct sales model from a distributor based model.

Costs of tissue sales

Costs of tissue sales consist primarily of tissue and device manufacturing costs. Costs of tissue sales increased by 52.2%, or \$795,484, to \$2,318,142 for the year ended December 31, 2009, from \$1,522,658 for the year ended December 31, 2008. The increase was the result of increased costs associated with our sales and a product mix shift which resulted in higher sales of products with higher costs.

Operating Expenses

Operating expenses include general and administrative expenses, selling and marketing expenses, depreciation, research and development expenses, and compensation costs, including incentive compensation. Operating expenses increased 56.0%, or \$3,122,551 for the year ended December 31, 2009 compared to the year ended December 31, 2008.

General and Administrative

General and administrative expenses consist principally of employee related costs and corporate expenses for legal, accounting and other professional fees as well as occupancy costs. General and administrative expenses increased 58%, or \$2,166,503 to \$5,916,776, for the twelve months ended December 31, 2009 compared to 2008. The increase is largely associated with increased legal and professional fees incurred between the two periods. As a percentage of revenues, general and administrative expenses were 80.0% in 2009 compared to 46% in 2008.

Selling and Marketing

Selling and marketing expenses exclude sales based compensation expense and primarily consist of costs for trade shows, sales conventions and meetings, travel expenses, advertising and other sales and marketing related costs. Selling and marketing expenses increased 198.7%, or \$852,762, to \$1,281,932 for the twelve months ended December 31, 2009 from \$429,170 for 2008. As a percentage of revenue, selling and marketing expenses increased to 17.34% in 2009 from 5.23% in the prior year. The increases were primarily the result of increased travel costs associated with the larger sales force and a substantial increase in marketing and advertising activities in 2009 as part of our switch to a direct sales force model from a distributor based model.

Depreciation

Depreciation expense consists of depreciation of long-lived property and equipment. Depreciation expense remained relatively unchanged increasing to \$661,847 in 2009 from \$646,846 in 2008.

Research and Development

Research and development expenses consist primarily of costs for product research and development and department related expenses. Research and development expenses were \$288,091 in 2008. In 2009, we did not incur any research and development expenses as we focused our efforts on the implementation of our direct sales force model.

Stock Options/Restricted Stock Compensation Expense

Stock Options/Restricted Stock Compensation Expense expense consists of non-cash stock compensation expense. Stock Options/Restricted Stock Compensation Expense increased 81.6% or \$376,376, to \$837,350 for 2009 from \$460,974 in the comparable year period for 2008. This increase was primarily due to our implementation of a direct sales effort in 2009 which substantially increased the sales force headcount. In addition, we granted more stock options to employees in 2009 than in the prior year. As a percentage of revenues, compensation expense in 2009 was 11.33% compared to 5.61% in the prior year.

Interest Expense

Interest expense is from our promissory notes and convertible debt instruments. Interest expense for the year ended December 31, 2009 decreased 62.61%, or \$860,426, as compared to the year ended December 31, 2008. This decrease was a result of lower debt balances during the year and non-cash charges related to warrants issued with certain debt instruments.

Liquidity and Capital Resources

Since our inception, we have historically financed our operations through operating cash flows, as well as the private placement of equity securities and debt, and other debt transactions. Most recently, on June 30 and July 30, 2010, we raised approximately \$9,272,000 through a private placement of equity securities and conversion of all of one earlier bridge financing and a substantial portion of another. At June 30, 2010, we had approximately \$5,075,700 of cash and cash equivalents and accounts receivables. In addition, we have access to credit lines secured by certain of our accounts receivable balances. At June 30, 2010, we had convertible notes payable of approximately \$1,850,000 in outstanding principal, of which \$1,450,000 has been repaid and \$400,000 has converted into shares of our common stock and warrants on the same terms as such debt would have converted in our recent private placement transaction if it had been converted therein.

Net cash used in operating activities for the six months ended June 30, 2010 was \$4,018,463. This was primarily related to cash used to fund our operations as well as an increase of accounts receivable of approximately \$675,099 and an increase in our inventory balance of approximately \$916,633. For the six months ended June 30, 2009, net cash used in operating activities was \$1,886,606 due to a lower net loss compared to 2010 resulting from our decision to go to a direct sales effort in the second half of 2009. Net cash used in operating activities for the year ended December 31, 2009 was \$3,671,596. This was primarily related to cash used to fund the Company's operating losses as well as an increase of accounts receivable of approximately \$739,000 and an increase in our inventory balance of approximately \$851,000. For the twelve months ended December 31, 2008, net cash provided by operating activities was \$502,008 due to a lower net loss compared to 2009.

Net cash provided by financing activities was \$7,237,471 and \$1,167,266 for the six months ended June 30, 2010 and 2009, respectively. The net cash provided from financing activities during 2010 was primarily the result of the sale of approximately \$4,700,000 in convertible debt instruments and the issuance of \$3,522,348 of common stock, net of issuance costs, in connection with the above referenced Reverse Merger and related financing transactions. These amounts were partially offset by principal payments on outstanding loan and lease obligations. Net cash provided by financing activities was \$3,436,991 and \$545,169 for the years ended December 31, 2009 and 2008, respectively. The net cash provided from financing activities during 2009 was \$1,950,000 from the sale and issuance of common stock and \$1,000,000 from releases on certain restrictions on cash. Net cash provided from financing in 2008 included \$1,000,000 in proceeds from notes payable, \$2,340,000 from issuance of convertible notes payable and \$1,278,514 from the sale and issuance of common stock. The cash inflows were partially offset by the payments of \$3,073,345 for long-term debt, stockholder notes and capital leases.

Off Balance Sheet Arrangements

We do not have any off balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity or capital expenditures or capital resources that are material to an investor in our shares.

Cash Requirements

We believe that our cash on hand from our recent private placement of equity securities, proceeds from the WTI financing and the exercise of warrants, as well as cash flow expected from operations will be sufficient to meet our anticipated cash requirements through March 31, 2011. If we do not meet our revenue objectives over that period, we may need to sell additional equity securities, which could result in dilution to our stockholders, or seek additional loans. The incurrence of indebtedness would result in increased debt service obligations and could require us to agree to operating and financial covenants that would restrict our operations. Financing may not be available in amounts or on terms acceptable to us, if at all. Any failure by us to raise additional funds on terms favorable to us, or at all, could limit our ability to expand our business operations and could harm our overall business prospects.

In addition, we currently anticipate that we will need to spend between \$4 and \$5 million over the next 5 years in order to increase, expand or update our existing facilities to meet our expected growth over that period.

Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

As previously disclosed on a Current Report on Form 8-K filed with the SEC on September 24, 2010, W.T. Uniack & Co., CPA's P.C. was dismissed as our independent accountant. On September 24, 2010, we engaged Child, Van Wagoner & Bradshaw as our new independent registered public accounting firm. In connection with this change in accountants, there were no disagreements (as that term is used in Item 304(a)(1)(iv) of Regulation S-K) or reportable events (as described in Item 304(a)(1)(v) of Regulation S-K).

BUSINESS

Unless the context otherwise requires, “we,” “our,” “us” and similar expressions used in this Business section refer to Bacterin prior to the closing of the Reverse Merger on June 30, 2010, and Bacterin International Holdings, Inc., f/k/a K-Kitz, Inc., as successor to the business of Bacterin, following the closing of the Reverse Merger transaction.

Overview of Our Business

We develop, manufacture and market biologics products to domestic and international markets through our biologics division. Our products are used in a variety of applications including enhancing fusion in spine surgery, relief of back pain with a facet joint stabilization, promotion of bone growth in foot and ankle surgery, promotion of skull healing following neurosurgery and subcondral bone defect repair in knee and other joint surgeries.

Our medical devices division develops medical devices intended for use in several diverse clinical areas including orthopedic, plastic, and cardiovascular surgery. Our background and expertise is in the research, testing, and development of coatings for medical devices, particularly antimicrobial-based coatings.

In addition to the manufacture and sales of coated medical devices, the medical devices division works with our biologics division to produce and distribute OsteoSelect® DBM putty, an osteoinductive product used by surgeons as a bone void filler in the extremities and pelvis. DBM putty is considered a combination product by regulatory agencies - both a tissue and a medical device.

The medical devices division also develops custom surgical instrument kits for use with allografts processed by our biologics division. These kits offer state-of-the-art instrumentation that is designed based upon the needs and inputs of surgeons who desire to use the most minimally invasive techniques. The instrumentation is intended to be an optimal delivery system for the proper placement of our proprietary allografts. Objectives of allograft use include pain relief, aid in the regeneration of tissue, and to provide a scaffold for bone fusion in spinal and sports medicine procedures.

The medical devices division actively develops intellectual property associated with our devices and coating platforms, for the purposes of protecting our Bacterin-branded devices and for use in alliance projects.

The manufacturing and operations of the biologics and medical devices divisions are organized separately while products from both are marketed through several channels including independent distributors, joint development projects and our direct sales network, which we began to implement in the last half of 2009. We currently anticipate that we will need to spend between \$4 and \$5 million over the next five years in order to increase, expand or update our existing facilities to meet our expected growth over that period. The focus of our efforts and the use of the proceeds from the recent bridge financings and the private placement have been used, and will continue to be used, to, expand our direct sales network. To date, we have reached our goal and established 13 regions with a regional vice-president in charge of all activities within the region and have hired and trained 52 sales representatives.

Our headquarters, laboratory and manufacturing facilities are located at 600 Cruiser Lane, Belgrade, Montana 59714. Our telephone number is (406) 388-0480 and our fax number is (406) 388-0422. We also maintain an office at 8310 S. Valley Highway, No. 300, Englewood, Colorado 80112, and have sales employees located across the United States.

We began operations in 1998 as a sole proprietorship founded by Guy Cook, our President and Chief Executive Officer, as a spinout of the Center for Biofilm Engineering at Montana State University, or the CBE. Mr. Cook is an expert in microbial testing methods and has been recognized by the U.S. Food and Drug Administration, or the FDA, industry, and academia for his contributions to the development of bioactive coatings. This sole proprietorship was eventually incorporated as “Bacterin, Inc.” in the state of Montana in January 2000 to further Mr. Cook’s work. In March 2004, Bacterin, Inc.’s stockholders completed the terms of a share exchange agreement with a company called Oil & Gas Seekers, Inc., a Nevada corporation, or OGS, which subsequently changed its name to “Bacterin International, Inc.”, to effectively become a publicly-traded corporation. As a result of this transaction, the stockholders of Bacterin, Inc., became stockholders of us, and Bacterin, Inc., became our wholly owned subsidiary. At the end of 2004, management concluded that this transaction was problematic and did not deliver the expected result. Based on this determination, we entered into an agreement in 2005 to amend the terms of the exchange transaction with the former majority stockholder of OGS. In May 2005, we merged Bacterin, Inc., up and into us.

Leveraging off the “state of the art” research and development activities ongoing at the CBE in biofilm technology, we began as a biomaterials testing laboratory and have systematically expanded our strategic vision towards the development of Bacterin-labeled medical devices. Our revenues were historically derived from testing services and milestone payments from collaborative product development agreements with various “blue chip” medical manufacturers. Today, however, we generate revenue from a number of revenue sources including the following: sales from products developed and manufactured by us under our own label; and contract revenue from analytical testing and development services provided to medical device manufacturer clients, which tailor our coating process to the client’s specific product/medical application. To a much lesser extent, under certain circumstances, we will receive license fees or royalties under collaborative product development efforts with medical device manufacturers.

During 2008, we reached an important transition point in our history. Most of our business endeavors prior to that time had been devoted to developing our products with revenue generated from a variety of limited sources, including testing, government grants and unsubstantial product sales. In 2008, however, revenue from product sales either under our name or “private label” became our primary source of revenue though we no longer generate revenue from any private label arrangements.

Industry and Market Overview

The orthopedic biomaterials market consists of materials that are organic, inorganic or synthetic in nature. These materials are implanted or applied in or near the indicated bone to facilitate healing, encourage bone tissue augmentation, compensate in areas where bone tissue is depleted and restore structure to allow for repair. Orthopedic biomaterials are capable of producing specific biological action or regenerative responses that are beyond what is observed in normal healing. These materials are often used as substitutes to autograft materials, which are taken from a harvest site in the patient to patch or repair the wounded or unhealthy site.

Bone is a biologically active tissue and may or may not regenerate depending on the condition of the patient. The damage may be significant enough that a scaffold to help regenerate the surgical site may be necessary. In 2009, the orthopedic biomaterials market was valued at almost \$3.5 billion. This market is expected to grow at a CAGR of 8.9% by 2016. (Idata Research Inc. 2010, U.S. Market for Orthopedic Biomaterials).

Products and Services

We have developed and currently manufacture and sell several human tissue-based products, primarily allografts, into the medical marketplace through our biologics division. In addition, we also manufacture and sell, directly under our own name and indirectly through distributors, various coating and surgical drain products through our medical devices division.

Biologics Division

Our biologics products include OsteoSponge®, OsteoSponge® SC, OsteoWrap®, OsteoLock® and BacFast®, as well as certain other allograft products which are briefly described below:

- OsteoSponge® is a form of demineralized bone matrix made from 100% human bone. Derived from trabecular (cancellous) bone, OsteoSponge® provides a natural scaffold for cellular in-growth and exposes bone-forming proteins to the healing environment. The malleable properties of OsteoSponge® enable it to conform to, and fill, most defects. Upon compressing the allograft, OsteoSponge® springs back to completely fill the void. Its unique mechanical and biological properties make OsteoSponge® an ideal bone graft for use in various orthopedic practices including spine, neurology, cranial/maxillofacial, trauma, plastic/reconstruction and general procedures where new bone growth is needed.

- OsteoSponge® SC is a form of OsteoSponge® designed to be used in joint surgery. Bacterin has shown, in goat studies, the ability to regenerate cartilage in joint repair and believes that this product has the potential to significantly change the standard of care in human joint surgery. We have received permission from the FDA to market this product as a subchondral bone void filler and are currently marketing it as such. Surgeons are using the product and we are beginning trials to establish the ability to market it as a cartilage re-generation scaffold. These trials are likely to take two years and we will likely publish preliminary results of the study at six months and one year. There can be no assurance that these trials will be successful or lead to any FDA action. We have allocated approximately \$750,000 to fund this clinical trial.
- OsteoWrap® is 100% human cortical bone demineralized through a proprietary process to make the graft flexible while maintaining allograft integrity. This product has various applications in orthopedic, neurological, trauma, oral/maxillofacial and reconstructive procedures. OsteoWrap® can wrap around non-union fractures to assist with fusion, can act as a biologic plate or can be used in conjunction with a hardware plate system. Additionally, this product provides the surgeon with superior handling characteristics as the allograft can be easily sized using surgical scissors or a scalpel, and will withhold sutures or staples for fixation.
- OsteoLock® and BacFast® are facet stabilization dowels made from human bone. The shape of our facet stabilization dowel is engineered to maximize osteoconductivity and surface area contact, as well as provide stability to prevent migration from the surgical site. BacFast® HD, having the same design as OsteoLock®, is optimized through our proprietary demineralization technology. This technology increases the surface area of the outer collagen matrix of the graft while exposing native bone morphogenic proteins (BMPs) and growth factors. Because of the hyper-demineralization technology, BacFast® HD has osteoinductive properties, as well as being osteoconductive. OsteoLock® and BacFast® can be used to augment spinal procedures, or as a stand-alone procedure for mild spinal conditions. While this product is currently in production and use, Bacterin is initiating clinical studies to further support its effectiveness and we have allocated approximately \$100,000 to fund these clinical trials. There can be no assurance of the success of these trials.
- hMatrix™ dermal scaffold is an extension of Bacterin's core biologics technology and our third human acellular biological scaffold. hMatrix™ is an acellular matrix made from donated human dermal tissue that is used to replace a patient's damaged tissue. hMatrix™ provides a natural collagen tissue scaffold that promotes cellular ingrowth, tissue vascularization and regeneration. The hMatrix™ scaffold tissue reabsorbs into the patient's dermal tissue for a biocompatible, natural repair. We are planning commercial release of hMatrix™ during first quarter of 2011.

In addition, we make and sell (i) sports allografts which are processed specifically for anterior and posterior cruciate ligament repairs, anterior cruciate ligament reconstruction and meniscal repair, (ii) milled allografts which are comprised of cortical bone milled to desired shapes and dimensions, also called milled spinal allografts, and (iii) traditional allografts for multi-disciplinary applications including orthopedics, neurology, podiatry, oral/maxillofacial, genitourinary and plastic/reconstructive.

We are hoping to be able to expand our product definition for certain of our products to claim cartilage regeneration capability. Over the past few months, approximately 15 patients thus far have undergone knee, foot or ankle surgery for the purposes of the trial to make such claims. We plan to have 200 patients in the trial by year end. Thus far, the first patients were operated on in early 2010 and, in all cases, no adverse events were reported. We are 5 to 7 months away from reaching an anecdotal threshold at which point we hope that our findings can be presented to the sports medicine and orthopedic repair community.

Medical Device Products

Our medical devices division researches, tests and develops coatings for medical devices, particularly antimicrobial-based coatings. Such coatings contain active agents and provide our products with several potential advantages over traditional medical devices. They offer a means of protecting the surface of a medical device from contamination by pathogenic organisms, thereby minimizing the potential for infection. Other coatings can serve as a reserve for local delivery of active agents, enhancing a variety of biological functions such as bone growth and pain management. This division produces and distributes OsteoSelect® DBM putty, an osteoinductive product used by surgeons as a bone void filler in the extremities and pelvis.

OsteoSelect® DBM putty is engineered with the surgeon in mind. With outstanding handling characteristics, OsteoSelect® can be easily molded into any shape and compressed into bony voids. Taking the design a step further, Bacterin has validated a low-dose, low-temperature gamma sterilization process to provide maximum osteoinductive potential while still affording device level sterility. Every production batch of OsteoSelect® is tested for its bone growth characteristics allowing us to make that unique marketing claim.

Our medical devices division also develops custom surgical instrument kits for use with allografts processed by our biologics division. These kits offer state-of-the-art instrumentation that is designed based upon the needs and inputs of surgeons who desire to use the most minimally invasive techniques. The instrumentation is intended to be an optimal delivery system for the proper placement of our proprietary allografts. Objectives of allograft use include pain relief, aid in the regeneration of tissue, and to provide a scaffold for bone fusion in spinal and sports medicine procedures. We currently sell a surgical drain series called ViaTM, which is used to drain exudate from a surgical site. Building upon the ViaTM platform, Bacterin plans on releasing a second generation product called the Elutia® surgical drains which will be performance enhanced via an antimicrobial coating to help reduce the incidence of surgical site infection.

Our wound drain product is gaining attention at the VA Hospitals. During August 2010, we received notice that the Brook Army Medical Hospital in Texas, a level 1 trauma facility, will begin using our wound drain product system wide. This hospital currently reports that over fifty percent (50%) of post operative infections occur due to an uncoated wound drain that it is currently using. We are hopeful that over the next several months, our wound drain product will be distributed throughout the VA Hospital system. Our wound drain products sell into hospitals for \$40 and cost us approximately \$6 to produce.

On August 10, 2010, we announced that the FDA has cleared RyMed Technologies, Inc.'s InVision-Plus® CS™ needleless IV connector for commercialization. In a joint development project between RyMed and our company, the InVision-Plus CS™ is treated with our patented antimicrobial technology. The InVision-Plus CS™ is the only needleless IV connector to offer the combined antibacterial protection of chlorhexidine and silver. The device is designed to reduce potentially deadly, catheter-related bloodstream infections. We have received an initial order for the InVision-Plus CS™ with full production expected by the fourth quarter of 2010. We will receive a royalty on all devices treated for RyMed.

Technology and Intellectual Property

Patents

Our patent efforts have been, and will continue to be, primarily focused in two key areas:

- The delivery of bioactive agents impregnated into or onto metals, polymers or tissues which, when activated by bodily fluids, release the agent into the surrounding environment; and
- The development of innovative and novel, engineered tissue implants or constructs which employ acellular tissue and processes, and enhanced demineralized bone matrix products.

The following table summarizes our current patent portfolio, including patents covering technology licensed by us for use or inclusion in certain of our products:

<u>Title</u>	<u>Business Purpose</u>	<u>First Inventor</u>	<u>Serial or Patent Number</u>	<u>Date Filed or Granted</u>	<u>Status</u>
1. Pending U.S. Applications					
MEDICAL DEVICE INCLUDING A BIOACTIVE IN A NON-IONIC AND AN IONIC FORM AND METHODS OF PREPARATION THEREOF	This application arose out of a now defunct project. We retained rights as the technology may prove useful in the future. The patent describes the modification of elution profiles via active agent equilibration; it is potentially applicable to many coated products.	Mike Johnson	11/864,360	9/28/2007	Undergoing further examination
ANTIMICROBIAL COATING FOR INHIBITION OF BACTERIAL ADHESION AND BIOFILM FORMATION ®	This application relates to the coating used for the Elutia® wound drain and for the Bard BioBloc coating on their HemoStar hemodialysis catheter. The efficacy period can be varied according to the desired outcome; the coating has shown in vitro efficacy for between 7 and 21 days.	Guy Cook	10/891,885	7/15/2004	Non-final Office Action mailed 9/15/09; response submitted 12/15/09
PROCESS FOR DEMINERALIZATION OF BONE MATRIX WITH PRESERVATION OF NATURAL GROWTH FACTORS	This application is intended to protect OsteoSponge®, a core product produced by our Biologics division. OsteoSponge® is a novel form of demineralized bone matrix which provides a natural scaffold for cellular growth and exposes bone growth inducing proteins to the healing environment.	Nancy J. Shelby	12/130,384	5/30/2008	First examination: November 2010 (estimated)
2. Pending Foreign Applications					
MEDICAL DEVICE INCLUDING A BIOACTIVE IN A NON-IONIC AND AN IONIC FORM AND METHODS OF PREPARATION THEREOF	This application arose out of a now defunct project. We retained rights as the technology may prove useful in the future. The patent describes the modification of elution profiles via active agent equilibration and is potentially applicable to many coated products.	Mike Johnson	PCT/US2007/ 079924	9/28/2007	Preliminary Report on Patentability generated 3/13/09
ANTIMICROBIAL COATING FOR INHIBITION OF BACTERIAL ADHESION AND BIOFILM FORMATION	This application relates to the coating used for the Elutia® wound drain and for the Bard BioBloc coating on their HemoStar hemodialysis catheter. The efficacy period can be varied according to the desired outcome; the coating has shown in vitro efficacy for between 7 and 21 days.	Guy Cook	PCT/US2005/ 015162	4/28/2005	Entered National Phase in: Europe, Australia, Canada, Japan

PROCESS FOR DEMINERALIZATION OF BONE MATRIX WITH PRESERVATION OF NATURAL GROWTH FACTORS	This application is intended to protect OsteoSponge®, a core product produced by our Biologics division. OsteoSponge® is a novel form of demineralized bone matrix which provides a natural scaffold for cellular growth and exposes bone growth inducing proteins to the healing environment.	Nancy J. Shelby	PCT/US2008/ 006942	6/2/2008	Entered national Phase in: Europe, Canada, Mexico, Korea
AN ELASTOMERIC ARTICLE INCORPORATED WITH A BROAD SPECTRUM ANTIMICROBIAL	This application was generated as a means of protecting the technology used for a forthcoming product. We have observed long term (over 30 days) in vitro efficacy with this technology.	Benjamin P. Luchsinger	PCT/US2009/ 005103	9/11/2009	Awaiting International Search Report (this application will enter the US through PCT)
3. In-Licensed Intellectual Property					
SWOLLEN DEMINERALIZED BONE PARTICLES, FLOWABLE OSTEOGENIC COMPOSITION CONTAINING SAME AND USE OF THE COMPOSITION IN THE REPAIR OF OSSEOUS DEFECTS	This patent protects OsteoSelect®, Bacterin's DBM putty. OsteoSelect® has exceptional handling characteristics and can easily be molded into any shape and compressed into bony voids. Bacterin employs a low-dose, low-temperature sterilization process to provide maximum osteoinductive potential while maintaining device-level sterility.	Simon Bogdansky	5,284,655	2/8/1994	Granted - US Expires April 2011
FLOWABLE DEMINERALIZED BONE POWDER COMPOSITION AND ITS USE IN BONE REPAIR	This patent protects OsteoSelect®, Bacterin's DBM putty. OsteoSelect® has exceptional handling characteristics and can easily be molded into any shape and compressed into bony voids. Bacterin employs a low-dose, low-temperature sterilization process to provide maximum osteoinductive potential while maintaining device-level sterility.	Robert K. O'Leary	5,290,558	3/1/1994	Granted - US Expires April 2011

We believe our patent filings and patent position will facilitate growth and enhance our proprietary core competencies, enabling us to protect and expand revenue growth and stockholder value in the future. We expect that additional patent applications will be filed and prosecuted as inventions are discovered, technological improvements and processes are developed and specific applications are identified. The status of individual patents and patent jurisdiction is maintained in our internal records. We anticipate, however, that there may be instances in which we enter into collaborative research and development agreements with medical device companies under such terms that the medical device company may or will retain a right to make future patent filings arising from such cooperative development agreement. In such instances, we will attempt to protect our overall patent use rights by agreements which limit the right of the collaborative party to an exclusive right only as it pertains to the field of use, as defined by the applicable project's scope of work. In this manner, we anticipate that we will receive future benefit and use of such intellectual property outside the field of use, as defined by any given scope of work. There can be no assurance that we will be able to obtain final approval of any patents.

Trademarks

We believe in the superiority of our technology and products. As a result, we have invested in the development and protection of the names of our products in order to drive consumer awareness and loyalty to the brand. To protect this investment, we have registered, and continue to seek registration, of these trademarks and continuously monitor and aggressively pursue users of names and marks that potentially infringe upon our registered trademarks. We currently own registered trademarks to the following brand names of certain of our products: OsteoSponge®, OsteoWrap®, OsteoLock®, BacFast®, OsteoSelect®, and Elutia® and have recently applied to register hMatrix™. We recently sued Allosource for infringing our OsteoSponge® trademark by marketing their competitive allograft product under the name "AlloSponge." See "Business - Legal Proceedings."

Trade Secrets

To safeguard our proprietary knowledge and technology, we rely heavily upon trade secret protection and non-disclosure/confidentiality agreements with employees, consultants and third party collaboration partners with access to our confidential information. There can be no assurance, however, that these measures will adequately protect against the unauthorized disclosure or use of confidential information, or that third parties will not be able to independently develop similar technology. Additionally, there can be no assurance that any agreements concerning confidentiality and non-disclosure will not be breached, or if breached, that we will have an adequate remedy to protect us against losses. Although we believe our proprietary technology has value, because of rapid technological changes in the medical industry, we also believe that proprietary protection is of less significance than factors such as the intrinsic knowledge and experience of our management, advisory board, consultants and personnel and their ability to identify unmet market needs and to create, invent, develop and market innovative and differentiated new medical devices.

Donor Procurement

We implemented our biologics division, among other reasons, to secure and process our own tissue, which posed initial challenges and associated operational disadvantages. At the time we embarked on this plan, we lacked donor sources, manufacturing capabilities, and distribution channels. We also lacked the vertical integration of an in-house tissue processing laboratory and were thus constrained by sub-contracting tissue processing to outside processors. These same sub-contractors are essentially suppliers of their own tissue to the marketplace and are hence ultimately our competitors. We have since successfully secured rights of first refusal of human tissue with multiple recovery agencies. Concurrent with this initiative, we also sought to secure future allograft production capability by constructing our own tissue processing facility. We have now begun efforts to expand our network for donor tissue in anticipation of increased production and believe that this effort, along with our current network of procurement agencies, will be sufficient to supply enough donors to meet our forecasted revenue volume through 2011 and beyond. We expect to be able to continue to build the network for donor tissue as the needs arise.

Sales and Marketing

We are committed to building our direct sales channel into the primary method of distributing our products. We have promoted three regional vice presidents to the role of executive vice-president to lead the North, South and West thirds of the United States and established 13 regions with a regional vice president in charge of all activities within the region. We have hired and trained 52 sales representatives toward a near term goal of establishing four to five sales representatives in each region. While we expect that the cost of this initiative will likely result in a net loss from operations in 2010, it is our expectation that this investment in the direct sales network will lead to higher revenue in 2010 and beyond, as well as profitability in 2011 and beyond. No assurance can be given that these efforts will be successful.

After 7 months of testing by Broadlane, Inc., the largest operator of healthcare supply chains in the United States, and its clients, we were accepted in May 2010 as an authorized vendor in its group purchasing program, which enables Broadlane's customers to purchase products from us. Our contract with Broadlane has a three year term and may be terminated by either party for breach of contract and Broadlane may terminate the agreement if Bacterin or any of Bacterin's key personnel is convicted of an offense related to health care or listed by a federal agency as being debarred, excluded, or otherwise ineligible for federal program participation. Broadlane manages approximately \$10 billion in contract volume with over 6,000 medical facilities and 33,000 physician practices in its network. In June 2010, Broadlane issued a newsletter to its entire network showcasing and introducing Bacterin to all of its hospitals, independent delivery networks, ambulatory care and surgery centers. As a result of this contract, our sales force can now proceed to sell our products to this expansive network of doctors. We have already received our first order from Tenet Hospitals, which runs over 40 hospitals, and Advocates in Illinois, which manages approximately 25 hospitals.

We also market our products through independent distributors who receive a discount off of our list price and then sell to their customer base. Because we have experienced a decline in revenue from this sales channel, we expect it will continue to represent a smaller portion of our overall revenue as our direct distribution channel grows.

Within the medical devices division, our marketing strategy is to develop product development alliances with multinational medical device companies at the same time as we develop our own new products in fields or applications outside of the rights of our collaborative partners. We have implemented this strategy and are pursuing contract opportunities with other medical device companies.

Although we are in the process of discontinuing it, we also have a physician compensation program that compensates physicians as employees for referring our products to other surgeons and medical care providers with whom they do not have a disqualifying "financial relationship" under applicable laws. Physician employees, at our direction, refer us to other physicians and are paid a commission on all revenue generated by the referred physicians' use of our products. We have established procedures that are designed to prevent abuses involving these physician employees and others with whom they have financial relationships and been advised by counsel that this program complies with the Stark laws and applicable anti-kickback regulations.

Growth Strategy

After multiple years of product development, we believe that our technology has been largely market tested, and since 2009, we have been transitioning our focus to appropriately market and distribute our products. We have spent months preparing the business to capitalize on our core markets, as well as new market opportunities. In particular, we have diversified our supply of donor tissue, expanded our production capabilities, developed the infrastructure of what we believe will grow into a formidable sales force, refined the message to our market and started gathering proof points on how to scale our revenue in these markets.

We began implementing a direct sales network in July 2009. As of December 31, 2009, we had 7 regional vice presidents and 21 sales representatives. Currently, we have one national sales manager, 3 executive vice presidents, 12 regional vice presidents, and 28 sales representatives. We have met our goal of growing this sales force to 3 executive vice presidents, 13-15 regional vice presidents, and 52 sales representatives. We strive to hire sales representatives with deep industry experience and pre-existing contacts. In addition, we plan to utilize small independent sales representatives with entrenched physician relationships. We expect revenue to move towards 50% by employed sales representatives and 50% by independent sales representatives.

We are working on developing and implementing a high-level, national effort to present our products as a value proposition to hospital chains, insurers and other purchasing organizations. To this end, we have already entered into agreements with Banner Hospitals, the Hospital for Special Surgery, Broadlane (a purchasing organization for 1,200 hospitals and other medical facilities), and Access Mediquip (a national purchasing organization for ambulatory surgery centers). These agreements are paving the way for our sales representatives to call on physicians, as the hospital process has already been approved.

Competition

Because the orthopedic biomaterials market overlaps with a number of medical fields - spine, trauma, joint reconstruction, sports medicine, pharmaceuticals and biotechnology - fragmentation is to be expected. However, there is one clear leader in the market: Medtronic held 27.1% of the market in 2009. Medtronic's lead is based on the strength of their Infuse® growth factor product. However, the growth potential of this product has been affected by some negative media attention regarding off-label usage and adverse events with specific indications.

Beyond Medtronic, the orthopedic biomaterials market is comprised of a great number of players, each offering a multitude of products. It is expected that several new products will emerge over the coming years. These assumptions are based on the advance of technology and the clinical promise of regenerative therapies such as stem cells and bone marrow concentration.

Specific competitors in the orthopedic biomaterials markets are: Medtronic, DePuy, Synthes, Arthrex, Smith & Nephew, Nuvasive, OrthoFix, Biomet, Osteotech, Orthovita, MTF, Stryker, RTI, AlloSource, Lifenet Health, Integra, ConMed/Linvatec, Wright, Exactech, ArthroCare, Harvest, and Arterioocyte. (Idata Research Inc. 2010, U.S. Market for Orthopedic Biomaterials).

Government Regulation

We produce human allografts that are regulated and comply with all the criteria under both Sections 361 and 351 of the Public Health Service Act. Compliance is determined by the FDA during the inspection of our production facility. To date, we have successfully completed all of our FDA inspections. We are registered with the FDA as a manufacturer of human cellular and tissue products (HCT/Ps) as well as medical devices. We are an accredited member of the American Association of Tissue Banks in good standing. We meet all licensing requirements for the distribution of HCT/Ps in the States of Florida, California, Maryland and New York. We cannot predict the impact of future regulations on either us or our customers.

Human Tissue

Our human tissue products, which are sold through our biologics division, have been regulated by the FDA since 1993. In May 2005, three new, comprehensive regulations went into effect that address manufacturing activities associated with HCT/Ps. The first requires that companies that produce and distribute HCT/Ps register with the FDA. The second provides criteria that must be met for donors to be eligible to donate tissues and is referred to as the "Donor Eligibility" rule. The third rule governs the processing and distribution of the tissues and is often referred to as the "Current Good Tissue Practices" rule. Together, they are designed to ensure that sound, high quality practices are followed to reduce the risk of tissue contamination and of communicable disease transmission to recipients. Our HCT/P products such as OsteoSponge® are regulated by the Center for Biologics Evaluation and Research. Our OsteoSponge® and OsteoWrap® products are regulated as a HCT/P as determined by the Tissue Reference Group and regulated solely under Section 361 of the Public Health Service Act and 21 CFR Part 1271.

Medical Devices

Because our medical devices incorporate coating technologies, they are subject to regulation by the FDA. These medical devices require the approval of the FDA prior to sale within the United States. The manufacturers and licensees who use our coating technology in their medical devices will have the burden of demonstrating the safety and efficacy of the medical devices, a burden which we will assist such manufacturers and licensees in demonstrating to the extent our coating technologies are at issue. Sales of medical devices using our coating technology in the European Union will require the CE Mark certification and sales of such medical devices in Canada will require approval from the Medical Device Bureau of Canada.

Within the United States, the FDA process requires that a pre-market notification, or a 510(k) Submission, be made to the FDA to demonstrate that the medical device is safe and effective and is substantially equivalent to a legally marketed device that is not subject to pre-market approval. Applicants must compare the device to one or more similar devices that are commercially available in the U.S. (known as the "predicate device"), and make and support a claim of substantial equivalency to such predicate device. Support for such claims must include descriptive data and, when necessary, performance data. In some cases, data from clinical trials must also be submitted in support of a 510(k) Submission. The FDA must then issue an order finding substantial equivalency before the devices may be commercially distributed in the U.S. This process can take anywhere from three months to two or three years, and can be extremely expensive. The Center for Devices and Radiological Health regulates medical devices, including our OsteoSelect® DBM putty.

ISO Certification

In March 2010, we announced that we had received certification from the International Organization for Standardization, or ISO, for fulfilling the requirements of ISO 13485:2003. The Geneva based International Organization for Standardization is the world's largest developer and publisher of International Standards. ISO 13485:2003 specifies requirements for a quality management system. To obtain ISO 13485:2003 certification, an organization must demonstrate its ability to provide medical devices that consistently meet applicable customer and regulatory requirements. The primary objective of ISO 13485:2003 is to facilitate harmonized medical device regulatory requirements for quality management systems. All requirements of ISO 13485:2003 are specific to organizations providing medical devices, regardless of the type or size of the organization. The certification assures our customers and partners of our commitment to quality, and in the quality of our innovative products and processes. Additionally, we believe that the ISO 13485:2003 certification offers new markets and business opportunities for our products in the global marketplace.

Employees

As of November 23, 2010, we had 115 full-time employees, of whom 36 were in product development, 67 in sales and marketing, and 12 in administrative. In addition, we make use of a varying number of temporary employees and outsourced services to manage normal business cycles. None of these employees is covered by a collective bargaining agreement and our management considers relations with employees and services partners to be good.

Facilities

We lease approximately 16,000 square feet in a building located at 600 Cruiser Lane, Belgrade, Montana 59714. In addition to our corporate headquarters, this space also includes a clean room, fully equipped diagnostics laboratory, microbiology laboratory and testing laboratory. We lease the building under a ten-year operating lease which runs through October 2013 and has a monthly lease payment of \$10,000. The lease also has a ten-year renewal option.

In November 2007, we purchased a 14,000 square foot facility at 664 Cruiser Lane, Belgrade, Montana 59714. This building is an FDA registered facility with 5 "Class 1,000" clean rooms and currently houses our medical device coatings operations. The validated manufacturing areas and laboratory facilities located in this facility provide processing and testing space to manufacture medical devices pursuant to FDA, GMP regulations, and ISO 13485:2003. We expect this facility to meet all of our regulatory requirements for the manufacture of future Bacterin-label products, including our surgical drains (ViaTM and Elutia®), as well as production requirements for coated medical devices from our medical device partners. The facility is registered with the FDA for device design, device manufacture, and contract manufacture, as well as for screening, testing, storing, and distributing biological tissues.

We also lease office space in Englewood, Colorado, where certain of our administrative and sales functions are housed.

Legal Proceedings

In November 2009, we were served a complaint in connection with the following court action filed in Utah state court: Yanaki and Activatek v. Cook and Bacterin International, Inc., case number 090912772. This action involves the plaintiff's attempt to sell shares of our common stock to a third party in a private sale and claims, as its primary allegation, tortious interference with the sales contract. Plaintiff seeks \$300,000, 358,904 shares of our common stock, attorneys fees and costs. We believe this lawsuit is without merit and we are conducting a vigorous defense.

We initiated an arbitration proceeding in Bozeman, Montana to collect a large account receivable from OrthoPro, LLC under a Private Label Distribution Agreement. OrthoPro has made a counterclaim in that arbitration which, in our judgment, is without merit. We plan to vigorously pursue the recovery of all amounts owed and to defend against the counterclaim.

As a result of our policy to aggressively defend our intellectual property rights, we recently filed and served a complaint in a lawsuit styled Bacterin International, Inc. v. Allosource in the Federal District Court for the District of Colorado. Our complaint is based on Allosource's infringement of our OsteoSponge® trademark through Allosource's use of the name "AlloSponge." We are seeking an injunction against the continuing use of the ALLOSPONGE mark, plus unspecified commercial monetary damages. Allosource has generally denied all allegations and has filed a counterclaim to cancel the federal registration for OsteoSponge®. We believe the counterclaim has no merit and we intend to aggressively pursue our infringement claims.

We have been served a complaint in connection with Civil Action No. 8:10-cv-01589-VMC-EAJ filed by minSURG International, Inc., or minSURG, in the United States District Court in the Middle District of Florida. In this action, minSURG alleges infringement of U.S. Patent No. 7,708,761, entitled "Spinal Plug for a Minimally Invasive Facet Joint Fusion System" by many companies in our industry. minSURG seeks an injunction against alleged patent infringement plus unspecified commercial monetary damages. We have entered into a joint defense agreement with many of the other defendants in this action and plan a vigorous defense. Regardless of the outcome of this case, we do not anticipate this notice to have a material impact on our overall sales or operating results.

On September 20, 2010, we filed a complaint in the United States District Court for the District of Colorado (Civil Action No. 10-CV-02294-RPM-KMT) against Advanced Biologics, Inc. and Advanced Biologics, LLC, or Advanced, alleging infringing use of the Company's "OsteoSponge" trademark and sent a demand letter to Advanced, demanding Advanced cease any and all use of its "OsteoAMP Sponge" trademark or any other "OSTEO" and/or "SPONGE" formative mark in connection with human allograft tissue, demineralized bone matrix, and cancellous bone products. We are currently negotiating with Advanced and expect to reach an amicable resolution without resorting to litigation.

MANAGEMENT

Executive Officers and Directors

The names, ages and positions of our executive officers and directors are as follows:

Name	Age	Position
Guy Cook	45	Chairman of the Board, Chief Executive Officer, President and Chief Scientific Officer
Mitchell T. Godfrey	64	Director
Kent Swanson	65	Director
Michael Lopach	62	Director
Jon Wickwire	66	Director
John P. Gandolfo	50	Chief Financial Officer
Jesus Hernandez	54	Vice President of Biologics
Darrel Holmes	57	Vice President of Medical Devices

The principal occupations for the past five years (and, in some instances, for prior years) of each of our executive officers and directors are as follows.

Guy Cook, Chairman of the Board, Chief Executive Officer, President and Chief Scientific Officer, is considered an international expert in biofilm science and its application. He is widely published and has been invited to speak at many prominent biofilm conferences, including the “Anti-Infective Materials” Seminar in Tokyo and the FDA-CDRH Antimicrobial Device Efficacy Testing Seminar. Mr. Cook started his career as a product specialist in the Image Analysis Department for Laboratory Equipment Company in Chicago. He later became President of Delta Resources in Crystal Lake, Illinois, which specialized in developing customized image analysis solutions for the academic community. In 1996, he moved to Montana and worked as a Confocal Microscopist for the Center for Biofilm Engineering at the Montana State University where he developed several proprietary testing models for the medical device industry. Mr. Cook attended the University of Indiana and received Bachelor of Science degrees in Finance and Economics.

Mitchell T. Godfrey, Director, has been involved over the past 25 years in a number of private enterprises, including consulting for and participation in firms in the manufacturing, medical devices, nuclear, service and animal health industries. Mr. Godfrey graduated from the University of Utah in 1968 with Bachelor of Science degrees in psychology and mathematics. He served as a Lieutenant in the U.S. Navy for a period of four years in the 1960s. Upon his return from overseas duty, he served as a director of the Utah Vietnam Agent Orange Program. He currently is the Chairman of the Montana based Crow Creek Falls Conservation Group and has been actively involved in many other organizations. Mr. Godfrey joined us in October 2003 as our Chief Financial Officer until December 2007, when his primary responsibility was changed to investor relations. Mr. Godfrey currently serves as a consultant.

Kent Swanson, Director, was with Accenture for over 32 years, retiring from the firm in 2001 as a Senior Partner. He held global leadership and management positions in a wide range of industries and geographies. From 2001 to 2008, he was the Board Chair of ALN Medical Management; providing outsourced services for clinic-based physician practices. Also from 2001 to 2008, he was Board Chair for Boys Hope Girls Hope of Colorado, a charitable organization providing a home and scholarship education for disadvantaged children with significant capabilities and promise. From 2002 to 2009, he was a Board member, Audit Committee member and Compensation Committee Chair for MPC Computers. Mr. Swanson graduated with distinction from the University of Minnesota earning an M.S. in Business and received an M.B.A. from the University of Chicago in 1969.

Michael Lopach, Director, is a certified public accountant with over 30 years of accounting experience. Mr. Lopach spent 27 years of his career with Galusha, Higgins, Galusha & Co., the largest privately held accounting firm in Montana and northern Idaho, where he served as president and CEO. In 1999, Mr. Lopach founded Lopach & Carparelli PC, an accounting firm that focuses on medical practitioners. Mr. Lopach received his MBA from the University of Notre Dame. Mr. Lopach will serve as chairman of the Board’s Audit Committee.

Jon Wickwire, Director, is an attorney and founding shareholder of Wickwire Gavin, P.C., a national construction law firm which merged with Akerman Senterfitt, one of the top 100 law firms in the United States. Mr. Wickwire served as lead counsel on major infrastructure litigation and alternative dispute resolutions, both domestically and internationally, throughout his 35 year career, and was the founding fellow of the American College of Construction Lawyers. Mr. Wickwire also served as the founding chairman of the College of Scheduling, an organization dedicated to advancing the techniques, practice and profession of project scheduling, and has authored several books and articles on construction and public contract law, including *Construction Management: Law and Practice* and *The Construction Subcontracting Manual: Practice Guide with Forms*. Mr. Wickwire is a graduate of the University of Maryland and Georgetown University Law Center. Mr. Wickwire has been a shareholder of the Company for approximately 5 years and has participated in several rounds of financing. Mr. Wickwire will serve as chairman of the Corporate Governance and Nominating Committees.

John P. Gandolfo, Chief Financial Officer, joined Bacterin as its interim Chief Financial Officer on a part-time basis, effective June 4, 2010, and filled this position full time commencing on July 6, 2010. Mr. Gandolfo has 25 years of experience as chief financial officer of rapidly growing private and publicly held companies with a primary focus in the life sciences, healthcare and medical device areas. Mr. Gandolfo has had direct responsibility over capital raising, including four public offerings, financial management, mergers and acquisition transactions and SEC reporting throughout his professional career. Prior to joining Bacterin, Mr. Gandolfo served as the Chief Financial Officer for Progenitor Cell Therapy LLC, a leading manufacturer of stem cell therapies. Prior to joining Progenitor, Mr. Gandolfo served as the Chief Financial Officer for Power Medical Interventions, Inc., a publicly held developer and manufacturer of computerized surgical stapling and cutter systems, from January 2007 to January 2009. Prior to joining PMI, Mr. Gandolfo was the Chief Financial Officer of Bioject Medical Technologies, Inc., a publicly held supplier of needle-free drug delivery systems to the pharmaceutical and biotechnology industries, from September 2001 to May 2006, and served on the Bioject's Board of Directors from September 2006 through May 2007. Prior to joining Bioject, Mr. Gandolfo was the Chief Financial Officer of Capital Access Network, Inc., a privately held specialty finance company, from 2000 through September 2001, and Xceed, Inc., a publicly held Internet consulting firm, from 1999 to 2000. From 1994 to 1999, Mr. Gandolfo was Chief Financial Officer and Chief Operating Officer of Impath, Inc., a publicly held, cancer-focused healthcare information company. From 1987 through 1994, he was Chief Financial Officer of Medical Resources, Inc., a publicly held manager of diagnostic imaging centers throughout the United States. A graduate of Rutgers University, Mr. Gandolfo is a certified public accountant (inactive status) who began his professional career at Price Waterhouse.

Jesus Hernandez, Vice President of Biologics, began his career as the Director of the Organ and Tissue Bank at University of California, Irvine Medical Center. He has over 20 years of organ and tissue banking experience, including having served as Chief Operating Officer and Chief Executive Officer for two national tissue banks. Mr. Hernandez served as the Chief Operating Officer of Bone Bank Allografts from November 1997 to April 2005. He has been an advisor for various committees including the United Network for Organ Sharing, Association of Organ Procurement Organizations, North American Transplant Coordinators Organization, American Association of Tissue Banks and served as a board member of the World Children's Transplant Fund. Mr. Hernandez graduated from the University of California, Irvine. Mr. Hernandez has served in his current position since April 2005.

Darrel Holmes, Vice President of Medical Devices, joined Bacterin in 2003 as Director of Operations. Mr. Holmes started his career as chemist and later Director of Operations for ICL Scientific. He later worked for Hycor Medical as the Director of Manufacturing, and then as Director of Operations at Stratagene Cloning Systems. Mr. Holmes moved to Montana and became the President of Big Spring Water in Bozeman. He holds several certificates including Environmental Inspector with the Environmental Assessment Association and is a Hazardous Materials Specialist. Mr. Holmes attended California State University at Long Beach and graduated with a Bachelor's Degree in Biology. He has over 25 years of Technical Operations experience in the medical device and diagnostics industries.

Scientific Advisory Board

Our Scientific Advisory Board assists us with issues relating to the clinical development and exploitation of our coating and biologic technologies. As our needs evolve, members with required areas of interest and expertise are added. The members of our Scientific Advisory Board are compensated with stock options and shares of common stock under our equity incentive plan.

Steven Scott MD, is currently the Chairman of our Scientific Advisory Board and a member of the American Academy of Orthopaedic Surgeons, the Musculoskeletal Tumor Society and the Pediatric Society Orthopaedic of North America. Dr. Scott maintains an active orthopaedic practice in Salt Lake City and has special expertise in the use of Ilizarov External Fixation, pediatric orthopaedics, bone graft technology, and orthopedic oncology. Dr. Scott has authored many scientific publications, has presented at numerous national conferences and has a patent pending. He received his BA from Linfield College summa cum laude and attended medical school at the University of Colorado. He completed his orthopaedic training at the University of Utah and the Mayo Clinic; he holds a clinical appointment within the Department of Orthopaedics at University of Utah and received an M.B.A. through the University of Utah.

Board Composition and Terms of Office

The composition of our board of directors, and any future audit committee, compensation committee, and nominations and governance committee, will be subject to the corporate governance provisions of our primary trading market, including rules relating to the independence of directors. All directors hold office until the next annual meeting of stockholders and the election and qualification of their successors. Officers are elected annually by the board of directors and serve at the discretion of the board.

Board Committees

Subsequent to the consummation of the Reverse Merger, we recently established an audit committee, compensation committee and nominations and governance committee, in compliance with established corporate governance requirements.

Audit Committee.

The purpose of the Audit Committee is to assist the oversight of our Board of Directors of the integrity of the financial statements of our company, our company's compliance with legal and regulatory matters, the independent auditor's qualifications and independence, and the performance of our company's independent auditor and internal audit function. The primary responsibilities of the Audit Committee are set forth in its charter and include various matters with respect to the oversight of our company's accounting and financial reporting process and audits of the financial statements of our company. The Audit Committee also selects the independent auditor to conduct the annual audit of the financial statements of our company; reviews the proposed scope of such audit; reviews accounting and financial controls of our company with the independent auditor and our financial accounting staff; and reviews and approves transactions between us and our directors, officers, and their affiliates.

The Audit Committee currently consists of Messrs. Lopach and Swanson, each an independent director of our company under Nasdaq listing standards as well as under rules adopted by the SEC pursuant to the Sarbanes-Oxley Act of 2002. Mr. Lopach serves as the Chairman of the Audit Committee. The Board of Directors has determined that Messrs. Lopach and Swanson (whose backgrounds are detailed above) each qualify as an "audit committee financial expert" in accordance with applicable rules and regulations of the SEC.

Compensation Committee.

Although the Company formed a compensation committee subsequent to the consummation of the Reverse Merger, due to the resignation of two of the directors who formerly served on the compensation committee, there is only one remaining member. The Company anticipates that it will re-establish the compensation committee at some point in the near future, but at the present time, the duties of the compensation committee are being carried out by our board of directors.

Nominations and Governance Committee.

The purposes of the Nominations and Governance Committee include the selection or recommendation to our Board of Directors of nominees to stand for election as directors at each election of directors, the oversight of the selection and composition of committees of our Board of Directors, the oversight of the evaluations of our Board of Directors and management, and the development and recommendation to our Board of Directors of a set of corporate governance principles applicable to our company. The Nominations and Governance Committee currently consists of Messrs. Wickwire and Swanson, each of whom is an independent director of our company under Nasdaq listing standards as well as under rules adopted by the SEC pursuant to Sarbanes-Oxley. Mr. Wickwire serves as the Chairman of the Nominations and Governance Committee.

Nominations to the Board of Directors

Our directors take a critical role in guiding our strategic direction and overseeing the management of our company. Board candidates are considered based upon various criteria, such as their broad-based business and professional skills and experiences, a global business and social perspective, concern for the long-term interests of the stockholders, diversity, and personal integrity and judgment.

In addition, directors must have time available to devote to board activities and to enhance their knowledge in the growing business. Accordingly, we seek to attract and retain highly qualified directors who have sufficient time to attend to their substantial duties and responsibilities.

Indebtedness of Directors and Executive Officers

We have a note receivable from Guy Cook, our Chairman, Chief Executive Officer and President, in the principal amount of \$72,178, which bears interest at the prime rate of interest and is secured by certain shares of our common stock owned by Mr. Cook. This note relates to a transaction involving our wholly-owned subsidiary, Bacterin, prior to the Reverse Merger.

Family Relationships

There are no family relationships among our new directors and executive officers and any former or proposed directors or executive officers.

Legal Proceedings

As of the date of this prospectus, there are no material proceedings pending or threatened to which any of our directors, executive officers, affiliates or stockholders is or would be a party adverse to us.

EXECUTIVE COMPENSATION

The table below summarizes the compensation earned for services rendered to Bacterin International Holdings, Inc. f/ka/ K-Kitz, Inc. and Bacterin International, Inc. in all capacities, for the fiscal years indicated, by its Chief Executive Officer and two most highly-compensated officers other than the Chief Executive Officer.

Name and Principal Position	Year	Salary	Bonus	Stock Awards	Option Awards	Non-Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
Guy S. Cook ⁽¹⁾	2009	\$ 230,750	\$ 40,000 ⁽²⁾	\$ -	\$ -	\$ -	\$ -	\$ 34,897 ⁽²⁾	\$ 305,647
Chairman of the Board and Chief Executive Officer	2008	249,210	-	-	-	-	-	23,783	272,993
Jesus Hernandez ⁽¹⁾	2009	236,153	-	-	-	-	-	12,743	248,896
EVP - Biologics	2008	197,308	27,500	-	-	-	-	66,983	236,791
Darrel Holmes ⁽¹⁾	2009	100,000	-	-	-	-	-	15,744	115,744
EVP - Medical Devices	2008	57,115	-	-	-	-	-	9,040	66,155
Jennifer Jarvis	2009	-	-	-	-	-	-	-	-
Former Director, Chief Executive Officer, President and Chief Financial Officer ⁽³⁾	2008	45,000	-	-	-	-	-	-	45,000

- (1) Each of Mr. Cook, Mr. Hernandez and Mr. Holmes received this compensation in connection with their service to Bacterin, our wholly-owned subsidiary through which we now operate our business.
- (2) Mr. Cook received 50,000 shares of Bacterin common stock (or 25,000 shares of our common stock as adjusted to reflect the ratio used to determine the number of our shares issued to Bacterin stockholders in connection with the Reverse Merger) and is entitled to \$10,000, each as of December 31, 2009, for his service on Bacterin's board of directors for fiscal year 2009, though payment of the \$10,000 has been deferred indefinitely. Although this consideration reflects Bacterin's past board compensation policy, it does not reflect our current board compensation policy, which is discussed below.
- (3) Ms. Jarvis resigned from her position as a director and our Chief Executive Officer, President and Chief Financial Officer, effective June 30, 2010.

The aggregate amount of benefits in each of the years indicated did not exceed the lesser of \$50,000 or 10% of the compensation of any named officer.

Employment Agreements

We intend to keep the current employment agreements between Bacterin, our wholly owned subsidiary through which we now conduct our business, and Guy Cook, John P. Gandolfo, Jesus Hernandez and Darrel Holmes. The employment agreements are set forth as exhibits to the registration statement, of which this prospectus is a part. The employment agreements require each of the executives to perform such duties as are customarily performed by one holding their positions, which are President and Chief Executive Officer, Chief Financial Officer, Executive Vice President - Biologics Division and Executive Vice President - Medical Devices Division, respectively. The employment agreements for each of the above officers are for an indefinite term and provide that each of Messrs. Cook, Gandolfo, Hernandez and Holmes receive a fixed annual base salary during the term of the employment agreement. In addition, each executive is entitled to (a) receive certain cash bonuses as set forth in their respective employment agreements or as may be determined in the future by our compensation committee of our board of directors (or the entire board until such committee has been established) and (b) participate in our equity incentive plan.

The employment agreements are essentially terminable at will by reference to the termination procedures set forth in Bacterin's employee handbook but also provide for termination of an executive's employment without any further obligation of our company upon the disability of the executive for a period of 30 days or more during any calendar year.

The employment agreements also contain covenants (a) restricting the executive from engaging in any activity competitive with our business during the term of the employment agreement, (b) prohibiting the executive from disclosing confidential information regarding our company, and (c) requiring that all intellectual property developed by the executive and relating to our business constitutes our sole and exclusive property.

The officers also entered into lock-up agreements restricting the sale of their shares of our common stock until July 7, 2011.

Bacterin International Equity Incentive Plan

Prior to the consummation of the Reverse Merger, we adopted and ratified the Bacterin International Equity Incentive Plan. The following is a summary of the material terms of that plan.

The purpose of the incentive compensation plan is to enable us to attract, retain and motivate key employees, directors and, on occasion, independent consultants, by providing them with stock options and restricted stock grants. Stock options granted under the incentive compensation plan may be either incentive stock options to employees, as defined in Section 422A of the Internal Revenue Code of 1986, or non-qualified stock options. The plan is currently administered by our board of directors until we re-establish our compensation committee. The administrator of the plan has the power to determine the terms of any stock options granted under the incentive plan, including the exercise price, the number of shares subject to the stock option and conditions of exercise. Stock options granted under the incentive plan are generally not transferable, vest in installments and are exercisable during the lifetime of the optionee only by such optionee. The exercise price of all incentive stock options granted under the incentive plan must be at least equal to the fair market value of the shares of common stock on the date of the grant. The specific terms of each stock option grant will be reflected in a written stock option agreement.

Also, in connection with the Reverse Merger, we are substituting each equity award granted under the Bacterin International, Inc. 2004 Stock Incentive Plan, as most recently amended effective April 1, 2009, with a substantially similar equity award granted under our new plan; provided, that the number of shares which may be purchased under such substitute options and the exercise prices therefor reflect proportional adjustments required to be made to account for the ratio used in determining the number of shares issuable to Bacterin stockholders in connection with the Reverse Merger.

There are 6,000,000 shares of our common stock authorized to be issued under the plan, representing approximately 16.5% of our outstanding common stock or 12.5% on a fully-diluted basis. As of September 30, 2010, we had outstanding options to purchase 3,912,743 shares (at exercise prices ranging from \$0.10 to \$2.50 per share) granted, and 980,000 shares of restricted stock issued, to directors, executives, employees and consultants, leaving an additional 1,107,257 available for issuance thereunder. The vast majority of the outstanding options reflect substitute options to be granted to former holders of Bacterin options issued under its 2004 Stock Incentive Plan, as amended.

Except for the Equity Incentive Plan discussed above, we have not had a stock option plan or other similar incentive compensation plan for officers, directors and employees, and no stock options, restricted stock or stock appreciation rights grants were granted or were outstanding at any time prior to the Reverse Merger.

Outstanding Equity Awards at Fiscal Year-End (December 31, 2009)

Name	Number of Securities Underlying Unexercised Options		Option Awards Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options	Option Exercise Price	Option Expiration Date
	Exercisable	Unexercisable			
	Guy Cook	-			
Jesus Hernandez	500,000	-	-	\$ 1.34	10/10/16
Jesus Hernandez	58,000	-	-	\$ 1.60	5/19/15
Darrel Holmes	45,000	-	-	\$ 0.10	10/9/13
Darrel Holmes	30,000	-	-	\$ 1.34	10/9/16
Darrel Holmes ⁽¹⁾	18,288	-	56,713	\$ 1.50	12/29/18

(1) 11,713 of Mr. Holmes' unvested options vest on December 29, 2010; 15,000 vest on December 29, 2011; 15,000 vest on December 29, 2012; and 15,000 vest on December 29, 2013.

Potential Payments Upon Termination or Change-in-Control

SEC regulations state that we must disclose information regarding agreements, plans or arrangements that provide for payments or benefits to our named executive officers in connection with any termination of employment or change in control of the company. Except for Mr. Gandolfo's employment agreement described below, we currently have no employment agreements with any of our named executive officers which have payments upon termination or change in control, nor any compensatory plans or arrangements that provide for any payments or benefits upon the resignation, retirement or any other termination of any of our named executive officers, as the result of a change in control, or from a change in any named executive officer's responsibilities following a change in control.

Pursuant to the terms of Mr. Gandolfo's employment agreement, if Mr. Gandolfo's employment with our company is terminated by us in connection with a "Change of Control" (as defined therein), Mr. Gandolfo shall be eligible to receive 12 months' salary as severance, if he has delivered to us a complete release of any claims against us in form and substance reasonably satisfactory to us and if Mr. Gandolfo has not breached any section of his employment agreement. Mr. Gandolfo's current salary under the employment agreement is \$290,000 per year. The severance payments payable to Mr. Gandolfo will be paid biweekly through automatic deposits; provided that the initial payment of any severance hereunder shall begin on the eighth day after Mr. Gandolfo has signed the aforementioned release. A "Change of Control" is defined in Mr. Gandolfo's employment agreement to consist of either Guy Cook no longer serving as the Chief Executive Officer or a sale of all or substantially all of the assets of the Company.

Director Compensation

Name	Fees Earned or Paid in Cash ⁽¹⁾	Stock Awards ⁽²⁾	Option Awards	Non-Equity Incentive Plan Compensation	Change in Pension Value and Nonqualified Deferred Compensation Earnings	All Other Compensation	Total
Mitch Godfrey	\$ 10,000	\$ 40,000	-	-	-	-	\$ 50,000
Kent Swanson	\$ 10,000	\$ 40,000	-	-	-	-	\$ 50,000
Steve Warnecke ⁽³⁾	\$ 10,000	\$ 40,000	-	-	-	-	\$ 50,000

(1) Each of Bacterin's directors, regardless of management affiliation, earned \$10,000 for their service on Bacterin's board of directors during 2009 although payment of such amount has been indefinitely deferred.

- (2) Each of Bacterin's directors, regardless of management affiliation, received 50,000 shares of Bacterin common stock (or 25,000 shares of our common stock as adjusted to reflect the ratio used to determine the number of our shares issued to Bacterin stockholders in connection with the Reverse Merger) as of December 31, 2009, for their service on Bacterin's board of directors during 2009.
- (3) Mr. Warnecke resigned as a director effective May 22, 2010.

We are currently re-evaluating our director compensation policies and intend to adopt new ones shortly. We expect that such new policies may, among other things, entitle each non-management director to receive participation fees for attendance at regular and special meetings of our board of directors and stock options granted under our Bacterin International Equity Incentive Plan, to purchase shares of our common stock with an exercise price equal to the fair market value of such stock on the date of grant. Our board of directors will review director compensation annually and adjust it according to prevailing market conditions and good business practices. Notwithstanding the foregoing, we are considering a proposal that would, if adopted, grant 100,000 shares of restricted common stock to each member of the Board of Directors upon their joining the Board of Directors. Under this proposal, all of the shares of restricted stock held by a director would be forfeited if the director is not still serving as a member of our Board of Directors on the first anniversary of the date he or she joined, 50,000 shares of restricted stock would be forfeited if the director is not still serving as a member of our Board of Directors on the second anniversary of the date he or she joined, and 25,000 shares of restricted stock would be forfeited if the director is not still serving as a member of our Board of Directors on the third anniversary of the date he or she joined.

Compensation Committee Interlocks and Insider Participation

No interlocking relationship exists between our board of directors and the board of directors or compensation committee of any other company, nor has any interlocking relationship existed in the past.

Director Independence

During the year ended December 31, 2009, Kent Swanson was the only independent director on our board. We evaluate independence by the standards for director independence established by applicable laws, rules, and listing standards including, without limitation, the standards for independent directors established by the Nasdaq stock market.

Subject to some exceptions, these standards generally provide that a director will not be independent if:

- the director is, or in the past three years has been, an employee of ours;
- a member of the director's immediate family is, or in the past three years has been, an executive officer of ours;
- the director or a member of the director's immediate family has received more than \$120,000 per year in direct compensation from us other than for service as a director (or for a family member, as a non-executive employee);
- the director or a member of the director's immediate family is, or in the past three years has been, employed in a professional capacity by our independent public accountants, or has worked for such firm in any capacity on our audit;
- the director or a member of the director's immediate family is, or in the past three years has been, employed as an executive officer of a company where one of our executive officers serves on the compensation committee; or
- the director or a member of the director's immediate family is an executive officer of a company that makes payments to, or receives payments from, us in an amount which, in any twelve-month period during the past three years, exceeds the greater of \$1,000,000 or two percent of that other company's consolidated gross revenues.

Indemnification of Directors and Officers

Our certificate of incorporation provides that no director of the company will be personally liable to the company or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the company or our stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for the improper declaration of dividends or redemption of shares of capital stock in violation of Delaware law, or (iv) for any transaction from which the director derived an improper personal benefit.

We have entered into indemnification agreements with each of our executive officers and directors in which we have agreed to indemnify such officers and directors against expenses and liabilities in connection with any proceeding associated with such person's service as an officer or director of the Company to the fullest extent permitted by applicable law.

Further, Section 145 of the Delaware General Corporation Law, or DGCL, permits, in general, a Delaware corporation to indemnify any person who was or is a party to any proceeding (other than an action by, or in the right of, the corporation) by reason of the fact that he or she is or was a director or officer of the corporation, or served another entity in any capacity at the request of the corporation, against liability incurred in connection with such proceeding, including the estimated expenses of litigating the proceeding to conclusion and the expenses actually and reasonably incurred in connection with the defense or settlement of such proceeding, including any appeal thereof, if such person acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, in criminal actions or proceedings, additionally had no reasonable cause to believe that his or her conduct was unlawful. Section 145(e) of the DGCL permits the corporation to pay such costs or expenses in advance of a final disposition of such action or proceeding upon receipt of an undertaking by or on behalf of the director or officer to repay such amount if he or she is ultimately found not to be entitled to indemnification under the DGCL. Section 145(f) of the DGCL provides that the indemnification and advancement of expense provisions contained in the DGCL shall not be deemed exclusive of any rights to which a director or officer seeking indemnification or advancement of expenses may be entitled.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, officers, or controlling persons pursuant to the foregoing provisions, we have been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth information regarding the beneficial ownership of our common stock as of September 28, 2010, by,

- (a) each of our directors and executive officers,
- (b) all of our directors and executive officers as a group, and
- (c) each person who is known by us to beneficially own 5% or more of our common stock.

Name ⁽¹⁾	Number of Shares Beneficially Owned ⁽²⁾	Percentage of Shares Beneficially Owned ⁽³⁾
Executive Officers and Directors:		
Guy S. Cook	13,353,469 ⁽⁴⁾	36.54%
Mitchell Godfrey	825,133 ⁽⁵⁾	2.26%
Kent Swanson	516,066 ⁽⁶⁾	1.42%
Michael Lopach	100,000 ⁽⁷⁾	*
Jon Wickwire	671,241 ⁽⁸⁾	1.82%
John P. Gandolfo	-	-
Jesus Hernandez	558,000 ⁽⁹⁾	1.51%
Darrel Holmes	103,421 ⁽¹⁰⁾	*
All executive officers and directors as a group (9 persons)	16,003,304	42.67%

* Less than 1% of outstanding shares of common stock.

(1) The address of each person is c/o Bacterin International, Inc., 600 Cruiser Lane, Belgrade Montana 59714.

(2) Unless otherwise indicated, includes shares owned by a spouse, minor children and relatives sharing the same home, as well as entities owned or controlled by the named person. Also includes shares if the named person has the right to acquire those shares within 60 days after September 28, 2010, by the exercise or conversion of any warrant, stock option or convertible preferred stock. Unless otherwise noted, shares are owned of record and beneficially by the named person.

(3) The calculation in this column is based upon 36,841,386 shares of common stock outstanding on September 28, 2010. The shares of common stock underlying warrants and stock options are deemed outstanding for purposes of computing the percentage of the person holding them, but are not deemed outstanding for the purpose of computing the percentage of any other person.

(4) Includes (a) 20,000 shares of our common stock issuable to Sue Cook, Mr. Cook's spouse and our head of human resources, upon the exercise of stock options previously granted by Bacterin under its 2004 Stock Incentive Plan, (b) 484,375 shares of common stock acquired in the private placement that occurred concurrently with the Reverse Merger, and (c) warrants to purchase 121,094 shares of our common stock which were also acquired in such private placement.

(5) Includes 150,000 shares of our common stock issuable to Mr. Godfrey upon the exercise of stock options previously granted by Bacterin under its 2004 Stock Incentive Plan.

(6) Includes (a) 100,000 shares of restricted stock to which Mr. Swanson is entitled in connection with his agreement to continue to serve on the Board of Directors and (b) 69,843 shares of our common stock issuable to Mr. Swanson upon the exercise of warrants previously issued to Mr. Swanson in connection with his conversion of certain debt.

(7) Includes a proposed grant of restricted stock to new board members which has not yet been formally adopted (if adopted, this grant would likely be subject to vesting as described in Executive Compensation -- Director Compensation).

(8) Includes (a) a proposed grant of restricted stock to new board members which has not yet been formally adopted (if adopted, this grant would likely be subject to vesting as described in Executive Compensation -- Director Compensation), (b) 100,399 shares of common stock held by family trusts and family members, and (c) warrants to purchase 45,000 shares of common stock held by family trusts.

- (9) Represents shares of our common stock issuable to Mr. Hernandez upon the exercise of stock options previously granted by Bacterin under its 2004 Stock Incentive Plan.
- (10) Includes 93,288 shares of our common stock issuable to Mr. Holmes upon the exercise of stock options previously granted by Bacterin under its 2004 Stock Incentive Plan.

TRANSACTIONS WITH RELATED PERSONS, PROMOTERS AND CERTAIN CONTROL PERSONS

Guy Cook, our President and Chief Executive Officer, serves as a board member of West Coast Tissue Services and American Donor Services. Both of these entities recover tissue from donors. We reimburse them for their recovery fees, which are comprised primarily of labor costs. The aggregate amount of all payments we and our subsidiaries made to these entities since January 1, 2008 is \$575,297 to West Coast Tissue Services, and \$1,654,352 to American Donor Services. This relationship benefits us, and thus Mr. Cook, as these entities provide us with donors, thus insuring that we have a pipeline of current and future donors, which is necessary to our success. Mr. Cook's wife performs the bookkeeping and accounting for American Donor Services. She was paid \$60,126 in 2009 for her services, but received no compensation in 2006-2008 or 2010 for her services.

Concurrently with the closing of the Reverse Merger and the private placement, we repurchased and cancelled, 4,319,404 shares of our common stock from Jennifer Jarvis, our former director, chief executive officer and chief financial officer, for aggregate consideration of \$100 and certain other good and valuable consideration.

Convertible Capital, a firm where one of our former directors, Ken Calligar, is a principal, arranged for Mr. Calligar's two daughters and two other individuals to purchase approximately \$225,000 of bridge financing indebtedness which did not convert in our recently concluded private placement. The debt was purchased from five holders of such debt based on the understanding that the purchasers would thereafter be permitted to convert such indebtedness on the same terms as if they had converted the debt in such private placement transaction. Convertible Capital is entitled to all of the warrants associated with the conversions by the purchasers.

Unless delegated to the Compensation Committee by the Board of Directors, the Audit Committee reviews and approves all related party transactions and reviews and makes recommendations to the full Board of Directors, or approves, any contracts or other transactions with current or former executive officers of our company, including consulting arrangements, employment agreements, change-in-control agreements, termination arrangements, and loans to employees made or guaranteed by our company.

SELLING STOCKHOLDERS

The following table sets forth:

- (a) the name of each of the selling stockholders,
- (b) the number of shares of common stock beneficially owned by each such selling stockholder that may be offered for the account of such selling stockholder under this prospectus, and
- (c) the number of shares of common stock beneficially owned by each such selling stockholder upon completion of this offering.

Such information was obtained from the selling stockholders but has not been independently verified by us. The term “selling stockholder” includes the entities listed below and their respective transferees, pledgees, donees, or other successors.

Name of Selling Stockholder (1)	Shares Beneficially Owned Prior to Offering (2)		Shares Being Registered for Sale (3)	Shares Beneficially Owned After Offering (2)(3)	
	Number	Percent		Number	Percent
Alan B. Miller ⁽⁴⁾	72,918	*	72,918	-	-
Alan R. Davidson TTEE of the Alan R. Davidson Revocable Trust DTD 8/14/2007 ⁽⁵⁾	821,605	2.10%	821,605	-	-
Barry J. Goldstein ⁽⁶⁾	19,531	*	19,531	-	-
Beneficial Capital Corp ⁽⁷⁾	69,444	*	69,444	-	-
Benjamin M. Frank TR Benjamin M Frank Revocable Living Trust DTD 2/02/1986 ⁽⁸⁾	7,813	*	7,813	-	-
Benjamin M. Frank Revocable Living Trust DTD 2/7/1986 ⁽⁹⁾	19,531	*	19,531	-	-
Brian Abdoo ⁽¹⁰⁾	6,944	*	6,944	-	-
Calvin Leroy Schenk & Frances Eileen Schenk JT WROS ⁽¹¹⁾	50,781	*	50,781	-	-
Carlisle Capital, LLC ⁽¹²⁾	39,063	*	39,063	-	-
Convertible Capital ⁽¹³⁾	39,063	*	39,063	-	-
Cougar Valley LLC ⁽¹⁴⁾	365,589	1.00%	365,589	-	-
Curtis F. Brockelman, Jr. ⁽¹⁵⁾	36,460	*	36,460	-	-
Daniel Foley ⁽¹⁶⁾	191,227	*	191,227	-	-
Daniel R. Frank ⁽¹⁷⁾	117,188	*	117,188	-	-
David A. Fiore ⁽¹⁸⁾	6,944	*	6,944	-	-
David H. Clarke ⁽¹⁹⁾	74,164	*	74,164	-	-
David Sabath ⁽²⁰⁾	36,460	*	36,460	-	-
David Stefansky ⁽²¹⁾	294,299	*	45,149	249,150	*
David Telesco ⁽²²⁾	72,918	*	72,918	-	-
David W. Raisbeck ⁽²³⁾	55,556	*	55,556	-	-
Douglas Gauld ⁽²⁴⁾	54,688	*	54,688	-	-
Equity Trust Company d/b/a Sterling Trust Custodian, FBO Leonid Frenkel IRA ⁽²⁵⁾	97,176	*	97,176	-	-
Gary L. Nolt ⁽²⁶⁾	19,531	*	19,531	-	-
Genesis Asset Opportunity Fund LP ⁽²⁷⁾	138,889	*	138,889	-	-
Greg A. Baker and Louise D. Baker JT WROS ⁽²⁸⁾	72,918	*	72,918	-	-
Guy S. Cook ⁽²⁹⁾	13,348,467	36.54%	605,469	12,742,998	35.02%
Harborview Master Fund LP ⁽³⁰⁾	260,542	*	241,842	18,700	*
Harborview Value Master Fund LP ⁽³¹⁾	817,345	2.25%	595,000	222,345	*
Harry Mittelman & Brenda Mittelman JT WROS ⁽³²⁾	78,125	*	78,125	-	-

Harry Mittelman Revocable Living Trust ⁽³³⁾	118,059	*	118,059	-	-
Herbert A. Hardt ⁽³⁴⁾	39,063	*	39,063	-	-
Howard Rubin ⁽³⁵⁾	100,000	*	100,000	-	-
Ian J. Cassel ⁽³⁶⁾	489,000	1.28%	489,000	-	-
Jeffrey L. Krushinski ⁽³⁷⁾	19,531	*	19,531	-	-
John Michael Andrews ⁽³⁸⁾	118,059	*	118,059	-	-
John P. Davy ⁽³⁹⁾	62,500	*	62,500	-	-
Judy E. Grossman ⁽⁴⁰⁾	39,063	*	39,063	-	-
Julie R. Frank Revocable Trust DTD 8/13/2001 ⁽⁴¹⁾	31,250	*	31,250	-	-
Kenneth S. Miller ⁽⁴²⁾	6,944	*	6,944	-	-
Leon Frenkel ⁽⁴³⁾	429,688	1.18%	429,688	-	-
Lionel N. Sterling Revocable Trust DTD 5/19/1997 ⁽⁴⁴⁾	101,563	*	101,563	-	-
Lisa M. Gallo Trust ⁽⁴⁵⁾	43,404	*	43,404	-	-
Mack Rossoff ⁽⁴⁶⁾	34,722	*	34,722	-	-
Martin W. Korman ⁽⁴⁷⁾	118,059	*	118,059	-	-
Matthew J. Cacciato ⁽⁴⁸⁾	36,460	*	36,460	-	-
Maurice Werdegar ⁽⁴⁹⁾	177,089	*	177,089	-	-
Merrill Lynch FBO: Jon M Wickwire IRA ⁽⁵⁰⁾	137,526	*	78,125	59,401	*
Michael H. Weiss ⁽⁵¹⁾	140,626	*	140,626	-	-
Michael P. Kimball ⁽⁵²⁾	39,063	*	39,063	-	-
Michel C Finzi or Melissa A. Finzi JT WROS ⁽⁵³⁾	58,113	*	58,113	-	-
Middlebury Securities, LLC ⁽⁵⁴⁾	796,217	2.19%	796,217	-	-
MKM Opportunity Master Fund, Ltd. ⁽⁵⁵⁾	295,147	*	295,147	-	-
Monarch Capital Fund Ltd ⁽⁵⁶⁾	13,889	*	13,889	-	-
Morris Smith and Devora Smith JT WROS ⁽⁵⁷⁾	187,502	*	187,502	-	-
NFS FBO John A. Swallow Roth IRA ⁽⁵⁸⁾	150,000	*	150,000	-	-
Paragon Capital LP ⁽⁵⁹⁾	816,314	1.61%	816,314	-	-
Periscope Partners L.P. ⁽⁶⁰⁾	137,154	*	137,154	-	-
Raymond Minella ⁽⁶¹⁾	86,806	*	86,806	-	-
RCII Ltd. ⁽⁶²⁾	235,125	*	235,125	-	-
Richard M. O'Leary ⁽⁶³⁾	31,250	*	31,250	-	-
Rita Blitt ⁽⁶⁴⁾	72,918	*	72,918	-	-
Sarah W. Palmer ⁽⁶⁵⁾	75,000	*	75,000	-	-
Sixty-Five Roses Ranch ⁽⁶⁶⁾	130,000	*	30,000	100,000	*
Spencer M. Calligar ⁽⁶⁷⁾	17,361	*	17,361	-	-
Standard Pacific Capital Holdings, LLLP ⁽⁶⁸⁾	562,500	1.55%	562,500	-	-
Star Acquisition LLC ⁽⁶⁹⁾	78,125	*	78,125	-	-
Stifel Nicolaus & Co. Custodian for Richard R. Palmer Roth IRA ⁽⁷⁰⁾	69,376	*	69,376	-	-
Stifel Nicolaus & Co. Custodian for Sarah W. Palmer Beneficiary IRA ⁽⁷¹⁾	75,000	*	75,000	-	-
Stuart G. Gauld IRA Rollover JPMCC Cust. ⁽⁷²⁾	41,063	*	39,063	2,000	*
Suzanne Veilleux ⁽⁷³⁾	40,063	*	39,063	1,000	*
Swallow Family LLC ⁽⁷⁴⁾	134,364	*	134,364	-	-
T.M. Lane ⁽⁷⁵⁾	41,667	*	41,667	-	-
Taylor B. Calligar ⁽⁷⁶⁾	17,361	*	17,361	-	-
The Corbran LLC ⁽⁷⁷⁾	294,299	*	45,149	249,150	*
Thomas F. Plaut ⁽⁷⁸⁾	36,460	*	36,460	-	-
Tom Colicchio ⁽⁷⁹⁾	72,918	*	72,918	-	-
Triage Capital Management, L.P. ⁽⁸⁰⁾	78,125	*	78,125	-	-

UVE Partners LLC ⁽⁸¹⁾	195,313	*	195,313	-	-
Warberg Opportunistic Trading Fund LP ⁽⁸²⁾	19,531	*	19,531	-	-
Western Technology Investment ⁽⁸³⁾	375,000	*	375,000	-	-
William H. White Jr. Family Trust U/A DTD 8/1/94 ⁽⁸⁴⁾	75,001	*	75,001	-	-
William Silver ⁽⁸⁵⁾	19,531	*	19,531	-	-

* Less than 1% of the outstanding shares of common stock

- (1) Except as otherwise indicated, each selling stockholder named in the table has sole voting and investment power with respect to all common stock beneficially owned by such stockholder.
- (2) The numbers and percentages shown include (a) the number of shares of common stock actually owned as of September 28, 2010, and (b) the shares of common stock that the identified person had the right to acquire within 60 days of September 28, 2010. In calculating the percentage of ownership, all shares of common stock which the identified person has the right to acquire within 60 days of September 28, 2010 are deemed to be outstanding for the purpose of computing the percentage of shares of common stock owned by such person, but are not deemed to be outstanding for the purpose of computing the percentage of shares of common stock owned by any other person.
- (3) We have no assurance that the selling stockholders will sell any of the common stock being registered for sale. For purposes of this table, we have assumed that the selling stockholders will have sold all of the shares covered by this prospectus upon completion of the offering, including such shares issuable upon the exercise of warrants.
- (4) Includes 37,143 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 15303 Pembroke Pt., Naples, FL 34110.
- (5) Includes 246,958 shares of common stock issuable upon the exercise of warrants. Alan R. Davidson is trustee of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 36 Candlewyck Dr., Henderson, NV 89052.
- (6) Includes 3,906 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 1014 East Hyman Ave., Aspen, CO 81611.
- (7) Includes 69,444 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is P.O. Box 40A, Villanova, PA.
- (8) Includes 1,563 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 106 Breckenwood Way, Sacramento, CA 95864.
- (9) Includes 3,906 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 106 Breckenwood Way, Sacramento, CA 95864.
- (10) Includes 6,944 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 308 West Ridgewood Ave. Ridgewood, NJ 07450.
- (11) Includes 10,156 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is PO Box 782, Thayne, WY 83127.
- (12) Includes 7,813 shares of common stock issuable upon the exercise of warrants. Walter S. Grossman is the general partner of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is Carlisle Capital, c/o Brookehill Capital, 276 Post Road, West Port, CT 06880, ATTN: Walt Grossman.

- (13) Includes 39,063 shares issuable upon the exercise of warrants. Ken Calligar, a former director, is a principal of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is c/o Bacterin International Holdings, Inc. 600 Cruiser Lane, Belgrade, MT 59714.
- (14) Includes 109,172 shares of common stock issuable upon the exercise of warrants. John A. Swallow is the manager of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 905 S. Jarvis Rd., Coeur d'Alene, ID 83814.
- (15) Includes 18,572 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 530 Lake Avenue Greenwich, CT 06830.
- (16) Includes 60,081 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 27 North Bayard Lane Mahwah, NJ 07430.
- (17) Daniel Frank is a former director of the Company. Includes 23,438 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 19 Whaling Road, Darien, CT 06820.
- (18) Includes 6,944 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 868 Southampton Dr. Palo Alto, CA 94303.
- (19) Includes 29,216 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is P.O. Box 1090 Loxahatchee, FL 33470.
- (20) Includes 18,572 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 224 Sunset Ave Ridgewood, NJ 07450.
- (21) David Stefansky is affiliated with Harborview Advisors LLC, an entity that provided consulting services in connection with our Reverse Merger. The address of this selling stockholder is 850 Third Avenue, Suite 1801 New York, NY 10022.
- (22) Includes 37,143 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 241 Mountain Ave Ridgewood, NJ 07450.
- (23) Includes 55,556 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 26640 Edgewood Shorewood, MN 55331.
- (24) Includes 10,938 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 32 Mora Ct. Manhasset, NY 11030.
- (25) Includes 30,706 shares of common stock issuable upon the exercise of warrants. Leon Frenkel is trustee of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 1600 Flat Rock Rd. Penn Valley, PA 19072.
- (26) Includes 3,906 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 208 W. Newport Road, Lititz, PA 17543.
- (27) Includes 138,889 shares of common stock issuable upon the exercise of warrants. Genesis Capital GP LLC is the general partner of this selling stockholder. Ethan Benovitz, Jaime Hardman, and Daniel Saks, as managers of the general partner, share voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 61 Paine Ave New Rochelle, NY 10804.
- (28) Includes 37,143 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 23615 Oak Valley Rd. Cupertino, CA 95014.
- (29) Guy Cook is our Chief Executive Officer, President, Chief Scientific Officer and Chairman of our board of Directors. Includes 121,094 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 246 Painted Hills Road, Bozeman, MT 59715.
- (30) Harborview Master Fund LP is affiliated with Harborview Advisors LLC, an entity that provided consulting services in connection with our Reverse Merger. Includes 131,895 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 850 Third Avenue, Suite 1801 New York, NY 10022.

- (31) Harborview Value Master Fund LP is affiliated with Harborview Advisors, LLC, an entity that provided consulting services in connection with our Reverse Merger. Includes 131,895 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 850 Third Avenue, Suite 1801 New York, NY 10022.
- (32) Includes 15,625 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 12100 Kate Drive Los Altos Hills, CA 94022.
- (33) Includes 46,508 shares of common stock issuable upon the exercise of warrants. Harry Mittelman is trustee of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 12100 Kate Drive Los Altos Hills, CA 94022.
- (34) Includes 7,813 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 5 Bluewater Hill, Westport, CT 06880.
- (35) Includes 20,000 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 1270 Broadway, Suite 909, New York, NY 10001.
- (36) Includes 163,659 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 952 Disston View Drive, Lititz, PA 17543.
- (37) Includes 3,906 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 120 Saybrooke Drive, Lititz, PA 17543.
- (38) Includes 46,508 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 552 Upper Ridgewood, NJ 07450.
- (39) Includes 12,500 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 14008 175th Place NE, Redmond, WA 98052.
- (40) Includes 7,813 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 277 North Avenue, Westport, CT 06880.
- (41) Includes 6,250 shares of common stock issuable upon the exercise of warrants. Julie Rae Frank is trustee of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 11529 Conway Road, St. Louis, MO 63131.
- (42) Includes 6,944 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 7196 Havenwood Dr. Castle Rock, CO 80108.
- (43) Includes 85,938 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 1600 Flat Rock Road, Penn Valley, PA 19072.
- (44) Includes 20,313 shares of common stock issuable upon the exercise of warrants. Lionel N. Sterling is trustee of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is c/o Equity Resources Inc., 5 Greenwich Office Park, Greenwich, CT 06831.
- (45) Includes 25,516 shares of common stock issuable upon the exercise of warrants. Lisa M. Gallo is trustee of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 265 West End Ave. Ridgewood, NJ 07450.
- (46) The address of this selling stockholder is c/o Bacterin International Holdings, Inc., 600 Cruiser Lane, Belgrade, MT 59714.

- (47) Includes 46,508 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 650 Page Mill Road Palo Alto, CA 94304.
- (48) Includes 18,572 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 3691 Gale Rd. Granville, OH 43023.
- (49) Includes 69,763 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 35 Corto Ln. Woodside, CA 94062.
- (50) Includes 15,625 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 917 Leigh Mill, Great Falls, VA 22066.
- (51) Includes 23,438 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 25 Briarwood Lane Lawrence, NY 11559.
- (52) Includes 7,813 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 3272 Lower Ridge Road, San Diego, CA 92130.
- (53) Includes 22,893 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 2540 Redding Rd. Fairfield, CT 06824.
- (54) Middlebury Securities, LLC served as placement agent in the private placement transactions described in this prospectus. The number of shares being registered for sale includes 690,000 shares of common stock issuable upon the exercise of warrants received as compensation for placement agent services. The address of this selling stockholder is 1043 Sheep Farm Road, Weybridge, VT 05753.
- (55) Includes 116,270 shares of common stock issuable upon the exercise of warrants. MKM Capital Advisors, LLC is the controlling entity of this selling stockholder and is controlled by David Skrilloff, who exercises voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is c/o MKM Capital Advisors 1515 Broadway, 11th Floor New York, NY 10036.
- (56) Includes 13,889 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 2nd Fl., Harbour House, Waterfront Drive, P.O. Box 972, Road Town, Tortola, British Virgin Islands VG1110.
- (57) Includes 31,251 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 195 Wildacre Ave. Lawrence, NY 11559.
- (58) Includes 30,000 shares of common stock issuable upon the exercise of warrants. John A. Swallow has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 905 S. Jarvis Rd. Coeur d'Alene, ID 83814.
- (59) Includes 230,698 shares of common stock issuable upon the exercise of warrants. Paragon Capital Advisors LLC is the general partner of this selling stockholder. Alan P. Donefeld is the manager of Paragon Capital Advisors LLC and as such, has voting and dispositive power over shares of common stock held by this selling stockholder. The address of this selling stockholder is 110 East 59th Street, 29th Floor, New York, NY 10022.
- (60) Includes 38,879 shares of common stock issuable upon the exercise of warrants. Leon Frenkel, as general partner of this selling stockholder, has voting and dispositive power over shares of common stock held by this selling stockholder. The address of this selling stockholder is 1600 Flat Rock Road, Penn Valley, PA 19072.
- (61) The address of this selling stockholder is c/o Bacterin International Holdings, Inc., 600 Cruiser Lane, Belgrade, MT 59714.

- (62) Includes 92,625 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 1 Hastings Road, St Helier, Jersey JE14HE, United Kingdom.
- (63) Includes 6,250 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 2819 4th St, Boulder, CO 80304.
- (64) Includes 37,143 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 11111 W 95 Overland Park, KS 66214.
- (65) Includes 12,500 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is c/o Bacterin International Holdings, Inc., 600 Cruiser Lane, Belgrade, MT 59714.
- (66) Sixty Five Roses Ranch used to provide accounting and financial services to the Company and is controlled by our former Chief Financial Officer. The address of the selling stockholder is 1026 Anaconda Drive. Castle Rock, CO 80108
- (67) The address of this selling stockholder is 12 Valley Road, Locust Valley, NY 11560.
- (68) Includes 112,500 shares of common stock issuable upon the exercise of warrants. Andrew R. Midler is the general partner of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 6501 Redhook Plaza, Suite 201, St. Thomas, U.S. Virgin Islands 00802.
- (69) Includes 15,625 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 18 White Drive Cedarhurst, NY 11516.
- (70) Includes 11,563 shares of common stock issuable upon the exercise of warrants. Richard R. Palmer has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 125 Fox Hollow Rd. Pinehurst, NC 28374.
- (71) Includes 12,500 shares of common stock issuable upon the exercise of warrants. Sarah W. Palmer has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 1125 East Mass. Ave. Southern Pines, NC 28387.
- (72) Includes 7,813 shares of common stock issuable upon the exercise of warrants. Stuart G. Gauld has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is c/o Bacterin International Holdings, Inc., 600 Cruiser Lane, Belgrade, MT 59714.
- (73) Includes 7,813 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 5 Basswood Court Bluffton, SC 29910-4455.
- (74) Includes 45,967 shares of common stock issuable upon the exercise of warrants. John A. Swallow is the manager of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 905 S. Jarvis Rd. Coeur d'Alene, ID 83814.
- (75) Includes 41,667 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 322 Harbour Dr., #204-D Naples, FL 34103.
- (76) The address of this selling stockholder is 12 Valley Road, Locust Valley NY 11560.
- (77) The Corbran LLC is affiliated with Harborview Advisors, LLC, an entity that provided consulting services in connection with our Reverse merger. The address of this selling stockholder is 850 Third Avenue, Suite 1801 New York, NY 10022.
- (78) Includes 18,572 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 23 Elden Drive Saddle River, NJ 07458.
- (79) Includes 37,143 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 95 Horatio Street New York, NY 10014.

- (80) Includes 15,625 shares of common stock issuable upon the exercise of warrants. Triage Management L.P. is the general partner of this selling stockholder. Triage Capital LF Group, LLC is the general partner of Triage Management L.P. and is controlled by Leon Frenkel, who has voting and dispositive power over shares of common stock held by this selling stockholder. The address of this selling stockholder is 401 City Avenue, Suite 528, Bala Cynwyd, PA 19004.
- (81) Includes 39,063 shares of common stock issuable upon the exercise of warrants. Gary M. Simon, as the managing member of this selling stockholder, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 1120 Avenue of the Americas, Suite 4015, NY, NY 10036.
- (82) Includes 3,906 shares of common stock issuable upon the exercise of warrants. Warberg Asset Management LLC is the general partner of this selling stockholder. Daniel Warsh and Jonathan Blumberg, as managers of the general partner, share voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 716 Oak Street, Winnetka, IL 60093.
- (83) The Company entered into a financing transaction with two subsidiaries of Western Technology Investment as described in the Recent Developments section of the prospectus summary. Includes 375,000 shares of common stock issuable upon the exercise of warrants. The address of the selling stockholder is 2010 North First St., Suite 310, San Jose, CA 95131.
- (84) Includes 12,501 shares of common stock issuable upon the exercise of warrants. Faye M. White is trustee of this selling stockholder and as such, has voting and dispositive power over the shares of common stock held by this selling stockholder. The address of this selling stockholder is 1125 East Mass. Ave., Southern Pines, NC 28387.
- (85) Includes 3,906 shares of common stock issuable upon the exercise of warrants. The address of this selling stockholder is 830 Park Ave., Apt. 4A, New York, NY 10021.

DETERMINATION OF OFFERING PRICE

All shares of our common stock being offered will be sold by the selling stockholders without our involvement; consequently the actual price of the stock will be determined by prevailing market prices at the time of sale or by private transactions negotiated by the selling stockholders. The offering price will thus be determined by market factors and the independent decisions of the selling stockholders.

PLAN OF DISTRIBUTION

We are registering the shares of common stock to permit the resale of these shares of common stock by the selling stockholders from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of common stock. We will bear all fees and expenses incident to our obligation to register the shares of common stock.

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

- any national securities exchange or quotation service on which the shares may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- through the writing of options, whether such options are listed on an options exchange or otherwise;
- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- sales pursuant to Rule 144;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

If the selling stockholders effect such transactions by selling common stock to or through underwriters, broker-dealers, or agents, such underwriters, broker-dealers, or agents may receive commissions in the form of discounts, concessions, or commissions from the selling stockholders or commissions from purchasers of the shares of common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions, or commissions as to particular underwriters, broker-dealers, or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of common stock or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock in the course of hedging in positions they assume. The selling stockholders may also sell shares of common stock short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge the shares of common stock to broker-dealers that in turn may sell such shares.

The selling stockholders may pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, as amended, amending, if necessary, the list of selling stockholders to include the pledgee, transferee, or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the shares of common stock in other circumstances in which case the transferees, donees, pledgees, or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

The selling stockholders and any broker-dealer participating in the distribution of the shares of common stock may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions, and other terms constituting compensation from the selling stockholders and any discounts, commissions, or concessions allowed or reallocated or paid to broker-dealers.

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

There can be no assurance that any selling stockholder will sell any or all of the shares of common stock registered pursuant to the registration statement, of which this prospectus forms a part.

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

We will pay all expenses of the registration of the shares of common stock pursuant to the registration agreement, estimated to be \$ _____ in total, including, without limitation, Securities and Exchange Commission filing fees and expenses of compliance with state securities or “blue sky” laws; provided, however, that a selling stockholder will pay all underwriting discounts and selling commissions, if any. We will indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act, in accordance with the registration agreement or the selling stockholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act, that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the registration agreement, or we may be entitled to contribution.

Once sold under the registration statement, of which this prospectus forms a part, the shares of common stock will be freely tradable in the hands of persons other than our affiliates.

DESCRIPTION OF SECURITIES

Common Stock

The holders of our common stock are entitled to one vote per share. Our certificate of incorporation does not provide for cumulative voting. The holders of our common stock are entitled to receive ratably such dividends, if any, as may be declared by our board of directors out of legally available funds. However, the current policy of our board of directors is to retain earnings, if any, for our operation and expansion. Upon our liquidation, dissolution or winding-up, the holders of our common stock are entitled to share ratably in all of our assets which are legally available for distribution, after payment of or provision for all liabilities and the preferences of any then outstanding shares of preferred stock. The holders of our common stock have no preemptive, subscription, redemption or conversion rights. All issued and outstanding shares of our common stock are, and the common stock reserved for issuance upon exercise of the warrants will be, when issued, fully-paid and non-assessable.

Preferred Stock

Our certificate of incorporation authorizes the issuance of up to 5,000,000 shares of “blank check” preferred stock with designations, rights and preferences as may be determined from time to time by our board of directors. We have not designated or issued any shares of our preferred stock to date.

Warrants

We issued warrants to purchase 1,509,271 shares of our common stock in our private placement with closings on each of June 30, 2010 and July 30, 2010, including warrants to purchase 361,875 shares of our common stock that were issued to the placement agents. Each warrant acquired in the private placement entitles the holder thereof to purchase shares of our common stock at an exercise price of \$2.50 per share from the date of issuance until the fifth anniversary thereof; provided, that note holders who converted debt in the private placement, received warrants with an exercise price of \$2.25 per share and the placement agents received warrants with an exercise price of \$1.60 per share. We also issued additional warrants to purchase 70,103 shares of our common stock in connection with subsequent conversions of \$400,000 in bridge financing indebtedness, also with exercise prices of \$2.25 per share.

The note holders in the bridge financings also received warrants to purchase 1,482,256 shares of our common stock and our placement agent received warrants to purchase 328,125 shares of our common stock as part of our bridge financing.

We also issued warrants to purchase 375,000 shares of our common stock to Western Technology Investment in connection with a financing and warrants to purchase 489,710 shares to a limited group of existing investors who exercised existing shares.

In addition, subject to adjustment for the ratio used to determine the number of shares issuable to Bacterin stockholders in connection with the Reverse Merger, we have assumed Bacterin’s obligations under its outstanding warrants immediately prior to the Reverse Merger and are in the process of issuing substitute warrants. As a result of such assumption and issuance of substitute warrants, we also have warrants outstanding to purchase 3,441,732 shares of our common stock. The exercise prices of these warrants range from \$2.00 to \$2.50 and commence expiring in March 2014 through December 2019.

Transfer, Exchange and Exercise.

The warrants may be exercised upon surrender of the certificate therefor on or prior to the expiration date (as explained below) at our offices with the form of exercise notice attached as an exhibit thereto filled out and executed as indicated, accompanied by payment (in the form of certified or cashier’s check payable to the order of our company) of the full exercise price for the number of warrants being exercised.

Adjustments.

All of our outstanding warrants contain provisions that protect the holders thereof against dilution by adjustment of the number of shares for which the warrants are exercisable as well as the exercise price to purchase such shares in certain events, such as stock dividends, stock splits, mergers and other similar events.

In addition, the warrants that were issued in connection with our recent bridge financings provide that, in the event that we issue any shares of our common stock (or securities convertible into or exercisable or exchangeable for shares of common stock) for an effective price of less than \$1.60 per share of common stock, except (i) securities which are issued pursuant to the bridge financings, (ii) shares of our common stock or options to purchase such shares issued to employees, consultants, officers or directors in accordance with stock plans approved by the board of directors, and shares of common stock issuable under options or warrants that are outstanding as of the date of the closing of the bridge financings or issued in the future pursuant to the our equity incentive plan up to a total of 6,000,000 shares, and (iii) shares of our common stock issued pursuant to a stock dividend, split or other similar transaction, the exercise price of each warrant shall be adjusted downward on a “full-ratchet” basis, i.e., to the lowest price per share at which our stock was issued or deemed issued, regardless of how many shares were issued at such price. The holder of a Warrant will not possess any rights as a stockholder of our company unless and until he exercises the Warrant.

Cashless Exercise.

The warrants issued in connection with our recent bridge financings and the private placement contain “cashless” exercise provisions which are available under certain circumstances. In a “cashless” exercise, a warrant is exchanged for a lesser number of shares because a portion of the shares is used to pay the exercise price.

Stockholder Rights.

The warrants do not confer upon holders any voting or any other rights as a stockholder of our company.

The foregoing discussion of our warrants, to the extent it relates to the warrants issued in the private placement, is qualified entirely by reference to the composite form of the warrant used in such private placement and included as an exhibit to the registration statement of which this prospectus is a part.

Registration Rights

We have agreed to use our best efforts to file this registration statement on Form S-1 with the SEC covering the resale of all shares of common stock and all shares of common stock underlying the warrants issued in connection with our recently concluded private placement (as well as up to 1,177,196 shares of our common stock held by certain of our stockholders at the time of the closing of the Reverse Merger and the shares underlying the placement agents’ warrants) on or before September 28, 2010 and use our best efforts to have such shelf registration statement declared effective by the SEC as soon as practicable thereafter, but in any event not later than December 27, 2010. We are also obligated to respond to any SEC comments within a stipulated period of time after receiving any such comments and to maintain the effectiveness of the shelf registration statement from the effective date through the earlier of (a) the date on which all the investors in the private placement have completed the sales or distribution described in the registration statement relating thereto or, if earlier until all securities covered by the registration rights agreement may be sold by the investors in the private placement under Rule 144(b)(1) and (b) the date that is eighteen (18) months anniversary of the sale of the securities. In the event the shelf registration statement is not filed with, or declared effective by, the SEC on or prior to the dates set forth above, or we fail to timely satisfy our reporting requirements, each investor in the private placement will receive cash liquidated damages equal to 1% of the purchase price for the shares of common stock and warrants acquired in the private placement for each month (or portion thereof) that the registration statement is not so filed or effective, or has failed to timely file required reports, provided that the aggregate payment as a result of the registration default will in no event exceed 12% of the purchase price for the shares of common stock and warrants. We will bear the expenses in connection with the registration of these shares (exclusive of any underwriting discounts and commissions, if any).

If, at any time or from time to time after the date of the effectiveness of the registration statement, we determine in good faith, following consultation with legal counsel, that (i) it would be detrimental to us and our stockholders for resales of the registered securities to be made pursuant to a registration statement due to the existence of a material development or potential material development involving us that we would be obligated to disclose in a registration statement, which disclosure would be premature or otherwise inadvisable at such time or would have a material adverse effect upon us and our stockholders, or (ii) such material development or potential material development involving us would adversely affect or require premature disclosure of the filing of a registration by us of any class of our equity securities, then we have the right to suspend offers and sales of the registered securities pursuant to a registration statement for a period of not more than 30 calendar days in any 12 month period, but only if we reasonably conclude, after consultation with outside legal counsel, that the failure to suspend the use of the registration statement would create a material liability or violation under applicable securities laws or regulations.

In addition, we have assumed the obligation of our wholly-owned subsidiary, Bacterin, to provide “piggy back” registration rights to the holders of warrants acquired in Bacterin’s two bridge financings which it conducted prior to the Reverse Merger.

Lock-Up Agreements

All shares of common stock issued in the Reverse Merger to the former holders of shares in Bacterin will be considered “restricted securities” under U.S. federal securities laws and may not be resold pursuant to Rule 144 for a period of one year after July 7, 2010, the date of the filing our Current Report on Form 8-K disclosing the closing of the Reverse Merger. Each of the former Bacterin stockholders who served as directors or executive officers of Bacterin as of the closing of the Reverse Merger or who have joined as members of our Board of Directors concurrently with the consummation of the Reverse Merger, or collectively, Management, have executed one-year a lock-up agreement with us which provide that their shares, including any shares that are now owned or are subsequently acquired by them, will not be, directly or indirectly, publicly sold, subject to a contract for sale or otherwise transferred for a period of 12 months following the Reverse Merger and the private placement; provided, however, that (a) the restrictions set forth in such lock-up agreement will not apply to any securities acquired by Management in the private placement and (b) Guy Cook is permitted to hypothecate, pledge and grant a security interest in up to 5,000,000 of his existing shares received from us in connection with the Reverse Merger as collateral for borrowed funds used to acquire securities in the private placement and, if such collateral is executed against, shall be permitted to assign and transfer such shares to the secured party free of any restrictions set forth therein.

Other Rights To Acquire Our Common Stock

We are contractually obligated to issue shares of our common stock to Harborview Advisors, LLC as follows:

- if, after seven months from the closing of the Reverse Merger and the private placement, our common stock is publicly trading at an average daily closing price of \$3.20 per share for the 30 days immediately preceding the last day of such seven month period, we must issue to such stockholder 187,500 shares of our common stock;
- if, after 13 months from the closing of the Reverse Merger and the private placement, our common stock is publicly trading at an average daily closing price of \$3.20 per share for the 30 days immediately preceding the last day of such thirteen month period, we must issue to such stockholder 187,500 additional shares of our common stock; and
- if, after 13 months from the closing of the Reverse Merger and the private placement, our common stock is publicly trading at an average daily closing price of \$4.80 per share for the 30 days immediately preceding the last day of such thirteen month period, we must issue to such stockholder 187,500 additional shares of our common stock (which shares, for the sake of clarification, shall be in addition to the shares to be issued pursuant to the second bullet point above).

Market Price and Dividends on Common Equity and Related Stockholder Matters Trading Information

Our common stock trades in the over-the-counter market and is quoted on the OTCBB and OTCQB Marketplace under the trading symbol BIHI.OB. The trading market for our common stock has been extremely limited and sporadic.

Although we have applied to list our common stock for trading on the Nasdaq Capital Market, no assurance can be given that we will satisfy the initial listing requirements, or that our shares of common stock will ever be listed on the Nasdaq Capital Market or another national securities exchange.

The warrants will not be registered or listed for trading.

Transfer Agent

Our current transfer agent and registrar for our common stock is Corporate Stock Transfer, Denver, Colorado. We serve as warrant agent for the warrants.

Holders of Record

As of September 28, 2010, there were approximately 358 holders of record of our common stock.

Dividends

We have not paid any dividends on our common stock and we do not intend to pay any dividends on our common stock in the foreseeable future.

LEGAL MATTERS

The validity of the securities in this offering will be passed upon for us by Exemplar Law, LLC.

EXPERTS

The financial statements appearing in this prospectus and registration statement on Form S-1 have been audited by Child, Van Wagoner & Bradshaw, PLLC, independent certified public accountants, as set forth in their report thereon appearing elsewhere in this prospectus and in the registration statement on Form S-1, and such report is included in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed a registration statement on Form S-1 with the Securities and Exchange Commission relating to the common stock offered by this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits and schedules to the registration statement. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance we refer you to the copy of the contract or other document filed as an exhibit to the registration statement, each such statement being qualified in all respects by such reference. For further information with respect to our company and the common stock offered by this prospectus, we refer you to the registration statement, exhibits, and schedules.

We file annual, quarterly, and current reports and other information with the SEC. Anyone may read and copy these materials, including the registration statement, without charge at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains a website at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that file electronically with the SEC.

Our website is located at www.bacterin.com. The information contained on our website does not constitute part of this prospectus. Through our website, we make available free of charge our annual reports on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, or the Exchange Act. These reports are available as soon as reasonably practicable after we electronically file those materials with the Securities and Exchange Commission.

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BACTERIN INTERNATIONAL HOLDINGS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS

	September 30, 2010	December 31, 2009
	(unaudited)	
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 571,844	\$ 54,155
Accounts receivable, net of allowance of \$ 122,949 and \$81,803, respectively	2,560,692	1,314,418
Notes receivable - trade	518,905	270,565
Inventories, net	6,971,792	5,000,713
Prepaid and other current assets	221,567	30,000
	10,844,800	6,669,851
Property and equipment, net	3,117,439	3,248,096
Intangible assets, net	541,417	554,268
Notes receivable - related party	82,255	-
Other assets	15,585	13,675
	14,601,496	10,485,890
Total Assets	\$ 14,601,496	\$ 10,485,890
LIABILITIES & STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	\$ 1,749,938	\$ 1,403,950
Accrued liabilities	1,052,972	463,630
Other current liabilities	315,000	-
Warrant derivative liability	7,429,968	75,231
Notes payable	956,978	1,126,693
Notes payable to stockholders	162,397	183,461
Current portion of capital lease obligations	35,780	85,071
Convertible notes payable, net of debt discount	393,834	820,787
Current portion of long-term debt	1,097,525	1,202,574
	13,194,392	5,361,397
Long-term Liabilities:		
Capital lease obligation, less current portion	-	27,074
Long-term debt, less current portion	292,800	412,545
	13,487,192	5,801,016
Stockholders' Equity		
Preferred stock, \$.000001 par value; 15,000,000 shares authorized; no shares issued and outstanding	-	-
Common stock, \$.000001 par value; 135,000,000 shares authorized; 35,903,864 issued shares and 35,900,160 outstanding shares on September 30, 2010 and 28,211,562 issued shares and 28,152,665 outstanding shares on December 31, 2009	36	28
Additional paid-in capital	31,329,914	22,238,747
Treasury stock, 58,897 shares on December 31, 2009 and 3,704 shares on September 30, 2010	(2,963)	(76,566)
Retained deficit	(30,212,683)	(17,477,335)
	1,114,304	4,684,874
Total Stockholders' Equity	1,114,304	4,684,874
Total Liabilities & Stockholders' Equity	\$ 14,601,496	\$ 10,485,890

See notes to unaudited condensed consolidated financial statements.

BACTERIN INTERNATIONAL HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2010	2009	2010	2009
Revenue				
Tissue sales	\$ 4,045,347	\$ 1,356,842	\$ 9,936,095	\$ 4,995,682
Royalties and other	146,639	25,975	193,424	207,554
Total Revenue	<u>4,191,986</u>	<u>1,382,817</u>	<u>10,129,519</u>	<u>5,203,236</u>
Cost of tissue sales (excluding depreciation expense presented below)	<u>711,173</u>	<u>973,436</u>	<u>1,832,967</u>	<u>1,631,555</u>
Gross Profit	<u>3,480,813</u>	<u>409,381</u>	<u>8,296,552</u>	<u>3,571,681</u>
Operating Expenses				
General and administrative	2,141,028	1,468,936	5,741,315	3,705,892
Sales and marketing	2,320,446	366,827	5,465,431	1,120,996
Depreciation	152,994	166,964	457,156	495,218
Stock Options/Restricted stock Compensation expense (excluded from general and administrative expense)	951,442	143,121	1,227,871	446,960
Total Operating Expenses	<u>5,565,910</u>	<u>2,145,848</u>	<u>12,891,773</u>	<u>5,769,066</u>
Loss from Operations	<u>(2,085,097)</u>	<u>(1,736,467)</u>	<u>(4,595,221)</u>	<u>(2,197,385)</u>
Other Income (Expense)				
Interest expense	(160,289)	(135,715)	(680,418)	(337,303)
Change in warrant derivative liability	(6,731,857)	-	(6,826,533)	-
Other income/expense	(65,984)	-	(633,176)	11,298
Total Other Income (Expense)	<u>(6,958,130)</u>	<u>(135,715)</u>	<u>(8,140,127)</u>	<u>(326,005)</u>
Net Loss Before Benefit (Provision) for Income Taxes	<u>(9,043,227)</u>	<u>(1,872,182)</u>	<u>(12,735,348)</u>	<u>(2,523,390)</u>
Benefit (Provision) for Income Taxes				
Current	-	-	-	-
Deferred	-	-	-	-
Net Loss	<u>\$ (9,043,227)</u>	<u>\$ (1,872,182)</u>	<u>\$ (12,735,348)</u>	<u>\$ (2,523,390)</u>
Net loss per share:				
Basic	\$ (0.26)	\$ (0.09)	\$ (0.42)	\$ (0.10)
Shares used in the computation:				
Basic	35,398,628	21,868,980	30,658,229	26,247,360

See notes to unaudited condensed consolidated financial statements.

BACTERIN INTERNATIONAL HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Nine Months Ended September 30,	
	2010	2009
Operating activities:		
Net loss	\$ (12,735,348)	\$ (2,523,390)
Noncash adjustments:		
Depreciation and amortization	493,608	529,941
Stock/option awards for services	427,197	686,955
Provision for losses on accounts receivable and inventory	51,902	5,473
Warrants issued for services	-	13,603
Restricted stock compensation expense	800,674	-
Non-cash interest expense	703,942	-
Change in derivative warrant liability	6,826,533	-
Changes in operating assets and liabilities:		
Accounts receivable	(1,287,420)	(193,383)
Notes receivable	(248,340)	-
Inventories	(1,981,835)	(570,335)
Accrued interest	-	11,138
Prepaid and other current assets	(191,567)	(61,361)
Other assets and liabilities	313,090	-
Accounts payable	345,988	(163,414)
Accrued liabilities	591,680	181,128
Net cash (used in) operating activities	<u>(5,889,896)</u>	<u>(2,083,645)</u>
Investing activities:		
Purchases of property and equipment	(326,499)	(61,484)
Gain on disposal of assets	-	116,437
Notes receivable from stockholder	(82,255)	(74,702)
Intangible asset additions	(23,601)	(55,259)
Net cash (used in) investing activities	<u>(432,355)</u>	<u>(75,008)</u>
Financing activities:		
Payments on long-term debt	(224,794)	(172,105)
Restricted Cash	-	1,000,000
Proceeds from issuance of convertible debt	4,700,000	-
Payments on convertible debt	(1,790,000)	-
Proceeds from NP shareholders	-	76,566
Proceeds from notes payable	-	57,876
Proceeds from capital leases	-	65,715
Payments on notes payable	(117,511)	(500,000)
Payments on related party notes	(23,402)	(34,769)
Payments on capital leases	(76,365)	(169,209)
Proceeds from issuance of common stock	5,095,934	1,675,000
Purchase of treasury stock	(730,622)	(76,566)
Proceeds from the exercise of stock options	6,700	-
Net cash provided by financing activities	<u>6,839,940</u>	<u>1,922,508</u>
Net change in cash and cash equivalents	517,689	(236,145)
Cash and cash equivalents at beginning of period	54,155	238,895
Cash and cash equivalents at end of period	<u>\$ 571,844</u>	<u>\$ 2,750</u>

See notes to unaudited condensed consolidated financial statements.

(1) Business Description and Summary of Significant Accounting Policies

Business Description

Bacterin International Holdings, Inc. (“the “Company” or “Bacterin”) develops, manufactures and markets biologics products to domestic and international markets. Bacterin’s proprietary methods optimize the growth factors in human allografts to create the ideal stem cell scaffold and promote bone and other tissue growth. These products are used in a variety of applications including enhancing fusion in spine surgery, relief of back pain with a facet joint stabilization, promotion of bone growth in foot and ankle surgery, promotion of skull healing following neurosurgery and cartilage regeneration in knee and other joint surgeries.

Bacterin’s device division develops anti-microbial coatings to inhibit infection based upon proprietary knowledge of the phenotypical changes made by microbes as they sense and adapt to changes in their environment. Bacterin develops, employs, and licenses bioactive coatings for various medical device applications. Bacterin’s strategic coating initiatives include the inhibition of biofilm formation, local (as opposed to systemic) drug delivery, local (as opposed to systemic) pain management, and anti-thrombotic factors for medical device applications.

Certain Risks and Concentrations

The Company’s revenue is derived principally from the sale or license of its medical products, coatings and device implants. The markets in which the Company competes are highly competitive and rapidly changing. Significant technological advances, changes in customer requirements, or the emergence of competitive products with new capabilities or technologies could adversely affect the Company’s operating results. The Company’s business could be harmed by a decline in demand for, or in the prices of, its products or as a result of, among other factors, any change in pricing or distribution model, increased price competition, changes in government regulations or a failure by the Company to keep up with technological change. Further, a decline in available tissue donors could have an adverse impact on the business.

Financial instruments subjecting the Company to concentrations of credit risk are accounts and notes receivable. The Company maintains cash, cash equivalents, and short-term investments with various domestic financial institutions. From time to time, the Company’s cash balances with its financial institutions may exceed federal deposit insurance limits.

The Company’s customers are worldwide with approximately 97% of sales in the United States for the nine months ended September 30, 2010. One customer accounted for approximately 9% and 14% of the Company’s revenue for the nine months ended September 30, 2010 and 2009, respectively. One customer represented 9% and 12% of accounts receivable at September 30, 2010 and 2009, respectively.

Revenue by geographical region is as follows:

	For the nine months ended September 30,	
	2010	2009
United States	\$ 9,814,424	\$ 4,703,646
Rest of World	315,095	499,590
	<u>\$ 10,129,519</u>	<u>\$ 5,203,236</u>

Use of Estimates

The preparation of the financial statements requires management of the Company to make a number of estimates and assumptions relating to the reported amount of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the period; the carrying amount of property and equipment and intangible assets; valuation allowances for receivables and deferred income tax assets; and estimates of expected term and volatility in determining stock-based compensation expense. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity date of three months or less to be cash equivalents. Cash equivalents are recorded at cost, which approximates market value.

Accounts Receivable and Notes Receivable - Trade

Accounts receivable represents amounts due from customers for which revenue has been recognized. Normal terms on trade accounts receivable are net 30 days and some customers are offered discounts for quick pay. Notes receivable include amounts due from West Coast Tissue Service, a supplier of donors to the Company. The Company performs credit evaluations when considered necessary, but generally does not require collateral to extend credit.

The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing receivables. The Company determines the allowance based on factors such as historical collection experience, customer's current creditworthiness, customer concentration, age of accounts receivable balance and general economic conditions that may affect a customer's ability to pay. Actual customer collections could differ from estimates. Account balances are charged to the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. Provisions to the allowance for doubtful accounts are charged to expense. The Company does not have any off-balance sheet credit exposure related to its customers.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined using the specific identification method and includes materials, labor and overhead.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization is computed using the straight-line method over the estimated useful lives of the assets, generally three to seven years for computers and equipment, and 30 years for buildings. Repairs and maintenance are expensed as incurred.

Intangible Assets

Intangible assets include costs to acquire and protect Company patents and are carried at cost less accumulated amortization. The Company amortizes these assets on a straight-line basis over their estimated useful lives of 15 years.

Grants

As part of the Company's efforts to build the development of new technologies, tissue donation and expansion of tissue supply, the Company, may, from time-to-time either provide or receive grants. These grant receipts are used for research and development efforts.

Revenue Recognition

Revenue is recognized when all of the following criteria are met: a) the Company has entered into a legally binding agreement with the customer; b) the products or services have been delivered; c) the Company's fee for providing the products and services is fixed and determinable; and d) collection of the Company's fee is probable.

The Company's policy is to record revenue net of any applicable sales, use, or excise taxes. If an arrangement includes a right of acceptance or a right to cancel, revenue is recognized when acceptance is received or the right to cancel has expired.

The Company sells to certain customers under consignment arrangements whereby the Company ships product to be stored by the customer. The customer is required to report the use to the Company and upon such notice, the Company invoices the customer.

Research and development services revenue is recognized as performed, based on the incurrence of qualifying costs or achievement of milestones as prescribed in the arrangement.

Research and Development

Research and development costs, which are principally related to internal costs for the development of new technologies and processes for tissue and coatings, are expensed as incurred.

Income Taxes

The Company records income taxes under the asset and liability method as prescribed under FASB Accounting Standards Codification (“ASC”) 740, Accounting for Income Taxes. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. When applicable, a valuation allowance is established to reduce any deferred tax asset when it is determined that it is more likely than not that some portion of the deferred tax asset will not be realized.

Impairment of Long-Lived Assets

Long-lived assets, including intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the estimated fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. No impairments of long-lived assets have been identified in any of the periods presented.

Net Income (Loss) Per Share

A reconciliation of the denominator used in the calculation of basic and diluted net (loss) per share is as follows:

Net (Loss) Per Share:	Three Months Ended September 30,	
	2010	2009
Net (Loss)	\$ (9,043,227)	\$ (1,872,182)
Basic net loss per share	\$ (0.26)	\$ (0.09)
Weighted average common shares outstanding for basic net (loss) per share	35,398,628	21,868,980

Dilutive earnings per share are not reported as the effect of including 11,106,105 and 6,567,391 outstanding stock options and warrants for the nine months ended September 30, 2009 and 2008, respectively, would be anti dilutive resulting in a lower net loss per share.

Reverse Merger Transaction

On June 30, 2010, the Company completed a reverse merger transaction (the “Reverse Merger”), in which we caused Bacterin International, Inc., a Nevada corporation (“Bacterin”), to be merged with and into a wholly-owned Nevada subsidiary created for purposes of effecting the Reverse Merger, and the stockholders of Bacterin obtained control of the Company. The Reverse Merger was consummated under Nevada corporate law pursuant to an Agreement and Plan of Merger, dated as of June 30, 2010. As a result of the Reverse Merger, Bacterin became our wholly-owned subsidiary and we are now engaged, through Bacterin, in the business of biomaterials research, development, and commercialization. K-Kitz ceased operations on June 30, 2010 in connection with the Reverse Merger transaction.

Pursuant to the terms of the Reverse Merger, the stockholders of Bacterin immediately preceding the Reverse Merger received one share of the Company’s common stock for each two shares of Bacterin common stock such stockholder held prior to the Reverse Merger (effectively resulting in a de facto one-for-two reverse stock split of the then outstanding Bacterin shares). The aggregate number of the Company’s shares of common stock so issued to the Bacterin stockholders, being 28,257,133 shares, represented approximately 96% of our outstanding common stock as of the closing of the Reverse Merger on June 30, 2010, prior to taking into account the issuance of any shares of our common stock pursuant to the private placement described below.

All share amounts, including those for which any securities are exercisable or convertible, have been adjusted to reflect the conversion ratio used in the Reverse Merger. In addition, stockholders equity and earnings per share have been retroactively restated to reflect the number of shares of Company common stock received by Bacterin stockholders in the Reverse Merger or the number of shares of Company common stock receivable by former Bacterin stockholders upon exercise or conversion of other securities held by them, as applicable.

Bacterin was deemed to be the acquiring company for accounting purposes and, accordingly, the Reverse Merger has been accounted for as a recapitalization. The consolidated financial statements of the Company after the Reverse Merger reflect the historical financial results of Bacterin before the consummation of the Reverse Merger and do not include the historical financial results of the Company before the consummation of the Reverse Merger.

Private Placement

Concurrently with the closing of the Reverse Merger on June 30, 2010, we also completed an initial closing of a private placement to selected qualified investors of shares of our common stock at a purchase price of \$1.60 per share and detachable warrants to purchase one-quarter share of our common stock (at an exercise price of \$2.50 per share) for each share of common stock purchased in the private placement.

In the initial closing on June 30, 2010, we sold 4,934,533 shares of our common stock and warrants to purchase 1,233,646 shares of common stock as part of this initial closing. We received gross proceeds of \$7,508,329 in consideration for the sale of the shares of common stock and warrants, which consisted of (i) \$4,026,000 in net cash from investors in the private placement and (ii) \$3,482,329 from note holders in two earlier Bacterin bridge financings (conducted to fund working capital and capital expenditures during the months prior to the Reverse Merger) who converted their outstanding principal and interest into the private placement at a 10% discount to the purchase price, being \$1.44 per share, and received identical warrant coverage as the cash investors except that the exercise price of the converting note holders' warrants is \$2.25 per share, a 10% discount to the exercise price of the warrants received by the cash investors. The note holders in the bridge financings also received warrants to purchase 1,482,256 shares of our common stock and our placement agent received warrants to purchase 328,125 shares of our common stock as part of the bridge financings.

In the second and final closing of this private placement on July 30, 2010, we sold a total of 1,102,500 additional shares of our common stock together with additional warrants to purchase an aggregate of 275,625 shares of our common stock for total gross cash proceeds of \$1,764,000.

Our placement agents received an aggregate of \$463,200 in cash fees in connection with the private placement (\$322,080 from the initial closing and \$141,120 from the second and final closing) and were reimbursed for their out-of-pocket expenses. In addition, the placement agents received an aggregate of 106,217 shares of our common stock (84,167 shares from the initial closing and 22,050 shares from the second and final closing) and warrants to purchase 361,875 shares of our common stock (251,625 shares from the initial closing and 110,250 shares from the second and final closing) at an exercise price of \$1.60 per share.

Following the private placement transaction, the Company has permitted an additional \$400,000 in principal amount outstanding under the bridge financing to convert into 280,411 shares of the Company's common stock and warrants to purchase 70,103 shares of the Company's common stock on the same terms as if such debt had actually converted in the private placement transaction.

On August 6, 2010, we paid certain of Bacterin's former stockholders, who held approximately 743,940 shares of Bacterin common stock in the aggregate (or the equivalent of 371,970 shares of our common stock post-Reverse Merger), the fair value for such shares in connection with the exercise of their dissenters' rights. As a result, and pursuant to the terms of the agreement governing the Reverse Merger, the former Bacterin stockholders (excluding the dissenting shareholders) are entitled to be issued 371,970 shares of our common stock (*i.e.*, the same number of shares that the dissenting stockholders would have received had they not exercised their dissenters rights) in proportion to such stockholders' pre-Reverse Merger share holding percentages in Bacterin.

On November 19, 2010, the Company entered into financing arrangement with two subsidiaries of Western Technology Investment ("WTI"), whereby WTI, through its subsidiaries, agreed to provide a credit facility which allows the Company to draw down \$2.5 million initially, and gives the Company the ability to draw down an additional \$2.5 million through April 30, 2011 provided the Company has achieved 90% of performance based milestones for the next two quarters. In addition, upon the mutual agreement of Bacterin and WTI, WTI has agreed to an additional commitment through December 31, 2011 of up to 25% of the next new round of equity financing or up to \$3.0 million. The credit facility is secured by the Company's personal property and carries an all-in interest rate of 12.5%. Repayment of the initial \$2.5 million will be interest only for the first six months, with principal and interest for the subsequent 30 months. The WTI facility also allows the company to obtain separate accounts receivable financing. In connection with the financing, WTI also received warrants to purchase up to 375,000 shares of the Company's common stock. The warrants have an exercise price of the lower of \$4.00 per share or the price at which shares of the Company's stock are sold in the next qualified financing, if applicable prior to the date of exercise. The WTI warrants expire on April 30, 2018. WTI also has the right to receive additional warrants to purchase 125,000 shares of the Company's common stock at the same exercise price if the Company draws down the second \$2.5 million tranche of the facility.

The Company also issued warrants to purchase a total of 489,710 shares of the Company's common stock to a limited group of existing investors who exercised existing warrants. The new warrants have an exercise price of \$4.00 per share and expire on the fifth anniversary of the date of issuance. The Company received a total of \$1,111,374 from the cash payments of the exercise price of the existing warrants.

The Company also issued 30,000 shares to a former executive in connection with a settlement agreement and converted the former executive's stock options to an equivalent number of warrants.

Stock-Based Compensation

On January 1, 2006, the Company adopted the provisions of ASC 718 for its stock-based compensation plans. Under ASC 718, stock-based compensation costs are recognized based on the estimated fair value at the grant date for all stock-based awards. The Company estimates grant date fair values using the Black-Scholes-Merton option pricing model, which requires assumptions of the life of the award and the stock price volatility over the term of the award. The Company records compensation cost of stock-based awards using the straight line method, which is recorded into earnings over the vesting period of the award. Pursuant to the income tax provisions included in ASC 718-740, the Company has elected the "short cut method" of computing its hypothetical pool of additional paid-in capital that is available to absorb future tax benefit shortfalls.

Comprehensive Income (Loss)

Comprehensive loss includes net income or loss, as well as other changes in stockholders' equity that result from transactions and economic events other than those with stockholders. The Company currently does not have any transactions that qualify for accounting and inclusion as other comprehensive income (loss).

Fair Value of Financial Instruments

The carrying values of financial instruments, including accounts receivable, notes receivable, accounts payable and other accrued expenses, approximate their fair values .

(2) Notes Receivable - Trade

Notes receivable - trade consist of the following:

	September 30, 2010	December 31, 2009
West Coast Tissue Service, Inc.	\$ 518,905	\$ 270,565

West Coast Tissue Service, Inc. is a non-profit corporation organized under Section 501(c)(3) of the Internal Revenue Code. The Company has contracted with West Coast Tissue Service to acquire its donor tissue for use in the Company's production. If the Company were unable to continue to receive donor tissue, it may have a material effect on its financial statements and results of operations. The notes are non-interest bearing.

(3) Inventories

Inventories consist of the following:

	September 30, 2010	December 31, 2009
Raw materials	\$ 281,673	\$ 1,279,006
Work in process	1,802,197	1,282,080
Finished goods	4,958,678	2,499,627
	7,042,548	5,060,713
Reserve	(70,756)	(60,000)
	\$ 6,971,792	\$ 5,000,713

(4) Property and Equipment, Net

Property and equipment, net are as follows:

	September 30, 2010	December 31, 2009
Buildings	\$ 1,613,628	\$ 1,613,628
Equipment	2,897,381	2,575,659
Computer equipment	238,243	235,566
Computer software	140,071	140,071
Furniture and fixtures	75,007	75,007
Leasehold improvements	900,348	898,248
Vehicles	68,306	68,306
Total cost	5,932,984	5,606,485
Less: accumulated depreciation	(2,815,545)	(2,358,389)
	\$ 3,117,439	\$ 3,248,096

Maintenance and repairs expense for the nine months ended September 30, 2010 and December 31, 2009, was \$49,759 and \$43,328, respectively. Depreciation expense related to property, plant and equipment, including property under capital lease, for the nine months ended September 30, 2010 and 2009 was \$457,156 and \$495,218, respectively.

(5) Intangible Assets

Bacterin has been issued various patents with regards to processes for its products.

The following table sets forth information regarding intangible assets:

	September 30, 2010	December 31, 2009
Intellectual Property		
Gross carrying value	\$ 734,072	\$ 710,471
Accumulated amortization	\$ (192,655)	\$ (156,203)
Net carrying value	\$ 541,417	\$ 554,268
Aggregate amortization expense:	\$ 34,724	\$ 46,080
Estimated amortization expense:		
2010		\$ 47,364
2011		\$ 47,364
2012		\$ 47,364
2013		\$ 47,364
2014		\$ 47,364

(6) Accrued Liabilities

Accrued liabilities consist of the following:

	September 30, 2010	December 31, 2009
Credit cards	\$ -	\$ 10,764
Accrued interest payable	12,267	75,382
Wages payable	884,040	377,484
Other accrued expenses	156,665	-
	<u>\$ 1,052,972</u>	<u>\$ 463,630</u>

(7) Notes Payable

Notes payable consist of the following:

	September 30, 2010	December 31, 2009
Note payable Kevin Daly	\$ -	\$ 200,000
Note payable Hamilton Group	459,661	426,693
Notes payable Flathead Bank	497,317	500,000
	<u>\$ 956,978</u>	<u>\$ 1,126,693</u>

The note payable to Kevin Daly was a 30-day note payable bearing interest at 15% and was repaid in January 2010. The Hamilton Group notes were repaid with the proceeds of the WTI financing on November 19, 2010. The notes payable to Flathead Bank are 6.5% short-term notes with monthly payments of \$3,728 and maturing on June 25, 2010. The maturity date of this note has since been extended.

(8) Convertible Notes Payable

	September 30, 2010	December 31, 2009
12% convertible note payable.	\$ 400,000	\$ 890,000
Less: debt discount	(6,165)	(69,213)
	<u>\$ 393,834</u>	<u>\$ 820,787</u>

The 12% convertible notes payable, as of September 30, 2010, mature in September, 2010, are secured by the Company's intellectual property and raw material inventory, and are convertible any time into common stock at \$1.44 per share. The Company was in compliance with the restrictive covenants of these notes as of September 30, 2010 and December 31, 2009. These notes were repaid during November 2010.

(9) Long-Term Debt

Long-term debt consists of the following:

	September 30, 2010	December 31, 2009
6.5% loan payable to Flathead Bank, \$7,278 monthly payments including interest, note has been extended, secured by building	\$ 963,154	\$ 976,218
8.50% loan payable to Flathead Bank, \$9,329 monthly payments, including interest, maturing in 2012, secured by equipment	224,774	293,052
5.00% loan payable to the City of Belgrade, \$3,653 monthly payments, including interest, maturing in 2012, secured by equipment	102,927	141,215
5.00% loan payable to the City of Belgrade, \$6,982 monthly payments, including interest, maturing in 2010, secured by equipment	-	39,044
5.00% loan payable to Valley Bank of Belgrade, \$4,140 monthly payments including interest, maturing September 1, 2011; secured by building	99,470	165,590
	<u>1,390,325</u>	<u>1,615,119</u>
Less: Current portion	<u>(1,097,525)</u>	<u>(1,202,574)</u>
	<u>\$ 292,800</u>	<u>\$ 412,545</u>

The following is a summary of maturities due on the long-term debt as of September 30, 2010:

2010	\$ 963,154
2011	99,470
2012	327,701
2013	-
Thereafter	-
Total	<u>\$ 1,390,325</u>

With the exception of the 6.5% loan payable to Flathead Bank, the other notes were all repaid with the proceeds of the WTI financing on November 19, 2010.

(10) Capital Leasing Transactions

Future minimum capital and operating lease payments are as follows:

2010	\$ 10,411
2011	25,369
2012	-
Thereafter	-

(11) Notes Payable to Stockholders

Notes payable to stockholders consist of the following:

	September 30, 2010	December 31, 2009
Notes payable to Guy Cook	\$ 76,969	\$ 76,969
Note payable to Mitch Godfrey	85,428	106,492
	<u>\$ 162,397</u>	<u>\$ 183,461</u>

The notes payable to Guy Cook and Mitch Godfrey do not have specified payment terms and bear 6% interest per annum. These notes were repaid with the proceeds of the WTI financing on November 19, 2010.

(12) Stock-Based Compensation

The Company's Equity Incentive Plan provides for stock awards, including options and performance stock awards, to be granted to employees, consultants, independent contractors, officers and directors. The purpose of the incentive compensation plan is to enable us to attract, retain and motivate key employees, directors and, on occasion, independent consultants, by providing them with stock options and restricted stock grants. Stock options granted under the incentive compensation plan may be either incentive stock options to employees, as defined in Section 422A of the Internal Revenue Code of 1986, or non-qualified stock options. The plan is currently administered by our board of directors but will be administered by our compensation committee once such committee has been established. The administrator of the plan has the power to determine the terms of any stock options granted under the incentive plan, including the exercise price, the number of shares subject to the stock option and conditions of exercise. Stock options granted under the incentive plan are generally not transferable, vest in installments and are exercisable during the lifetime of the optionee only by such optionee. The exercise price of all incentive stock options granted under the incentive plan must be at least equal to the fair market value of the shares of common stock on the date of the grant. The specific terms of each stock option grant will be reflected in a written stock option agreement. At September 30, 2010, the Company had approximately 6 million shares available for issuance under the equity plan.

Compensation expense recognized in the statement of operations for the nine months ended September 30, 2010 and 2009 is based on awards ultimately expected to vest and reflects an estimate of awards that will be forfeited. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

The estimated fair value of stock options granted is done using the Black-Sholes-Merton method applied to individual grants. Key assumptions used to estimate the fair value of stock awards are as follows:

- Risk-Free Rate: The risk-free rate is determined by reference to U.S. Treasury yields at or near the time of grant for time periods similar to the expected term of the award.
- Expected Term: The Company does not have adequate history to estimate an expected term of stock-based awards, and accordingly, uses the shortcut method as prescribed by Staff Accounting Bulletin 107 to determine an expected term.
- Volatility: The Company estimates expected volatility based on peer-companies as prescribed by ASC 718.
- Dividend Yield: The dividend yield assumption is based on the Company's history and expectation of dividend payouts and was 0% as of September 30, 2010 and 2009.

Activity under the Company's stock option plans was as follows:

	Nine months ended September 30, 2010		Nine months ended September 30, 2009	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding at Jan. 1,	3,353,493	\$ 1.33	1,999,160	\$ 1.23
Granted	1,220,500	1.60	1,440,000	1.56
Exercised	5,000	1.34	-	-
Cancelled or expired	(656,250)	1.51	(115,667)	0.88
Outstanding at September 30,	3,912,743	\$ 1.38	3,323,493	\$ 1.33
Exercisable at September 30,	1,536,198	\$ 1.13	1,033,411	\$ 0.96

The following table summarizes information concerning non-vested option transactions for the year ended December 31, 2009:

	Shares	Weighted Average Grant Date Fair Value Per Share
Nonvested Options		
Nonvested at January 1, 2009	1,776,044	\$ 0.90
Granted	69,600	1.00
Vested	(55,400)	0.83
Forfeited	(68,400)	0.90
Nonvested at December 31, 2009	1,721,844	\$ 0.90

From time to time the Company may grant stock options to consultants. The Company accounts for consultant stock options in accordance with ASC 505-50. Compensation expense for the grant of stock options to consultants is determined based on the estimated fair value of the stock options at the measurement date as defined in ASC 505-50 and is recognized over the vesting period.

In connection with private placements of convertible debt, short-term debt, and common stock, the Company issued warrants to purchase shares of common stock at an exercise price of between \$1.16 and \$2.50 per share. During 2009, 38,400 warrants were issued with private placements of common stock, 86,400 warrants were issued with the placement of short-term debt and 105,600 warrants were issued with the placement of convertible notes. Warrants issued with common stock were recorded as additional paid in capital at the estimated fair market value of \$13,601 in 2009. The warrants issued with convertible debt and short-term loans were recorded as interest expense at the estimated fair value of \$137,415 in 2009 using the following assumptions:

	September 30, 2010	December 31, 2009
Value of underlying common stock (per share)	\$ 1.60	\$ 1.60
Risk free rate	Varied	2.20%
Expected term	2.5 years	2.5-5 years
Dividend yield	0%	0%
Volatility	55%	44-61%

From January 1, 2010, through September 30, 2010, we issued warrants to purchase 1,482,256 shares of our common stock at an exercise price between \$2.16 and \$2.50 per share in connection with Bacterin's two prior bridge financings and warrants to purchase 1,579,374 shares of our common stock in connection with the closing of our private placement on June 30, 2010 and July 30, 2010 described above. Warrants to purchase 904,688 shares of our common stock which were issued to investors who purchased shares for cash in the private placement have an exercise price of \$2.50 per share and warrants to purchase 674,686 shares of our common stock which were issued to note holders who converted debt they acquired in Bacterin's two prior bridge financings into the private placement have an exercise price of \$2.25 per share, a 10% discount to the exercise price of the investors for cash.

Additionally, we issued warrants to our placement agents to purchase 328,125 shares of our common stock at an exercise price of \$1.66 per share in connection with Bacterin's two prior bridge financings and 361,875 shares of our common stock at an exercise price of \$1.60 per share in connection with the private placements which closed on June 30, 2010 and July 30, 2010.

The following table summarizes our warrant activities for the nine months ended September 30, 2010:

	Shares	Weighted Average Exercise Price
Outstanding at January 1, 2010	3,483,898	\$ 1.52
Issued	3,709,464	2.20
Exercised	-	-
Cancelled or expired	-	-
Outstanding at September 30, 2010	7,193,362	1.87

(13) Commitments and Contingencies

Operating Leases

The Company leases office facilities under a non-cancelable operating lease agreement with an expiration date in 2013. The Company has the option to extend the lease for another ten year term and has right of first refusal on any sale. The Company leases additional office facilities under month-to-month arrangements. Future minimum payments for the next five years and thereafter as of September 30, 2010, under these leases, are as follows:

2010	\$ 120,000
2011	\$ 120,000
2012	\$ 120,000
2013	\$ 72,258
Thereafter	\$ -

Rent expense was \$109,944 and \$126,716 for the nine months ended September 30, 2010 and 2009, respectively. Rent expense is determined using the straight-line method of the minimum expected rent paid over the term of the agreement. The Company has no contingent rent agreements.

(14) Income Taxes

The components of income (loss) before provision for income taxes consist of the following:

	Nine Months Ended September 30,	
	2010	2009
United States	\$ (12,735,348)	\$ (2,523,390)
	\$ (12,735,348)	\$ (2,523,390)

The reconciliation of income tax attributable to operations computed at the U.S. Federal statutory income tax rate of 35% to income tax expense is as follows:

	Nine Months Ended September 30,	
	2010	2009
Statutory Federal tax rate	\$ (4,457,371)	\$ (883,361)
Valuation allowance	(5,289,594)	1,049,069
State income taxes, net of Federal benefit	(878,739)	(174,148)
Nondeductible meals & entertainment expense	46,516	8,440
	\$ -	\$ -

(14) Income Taxes (continued)

Deferred tax components are as follows:

	September 30, 2010	December 31, 2009
Deferred tax assets:		
Accrued liability for vacation	\$ 121,008	\$ 85,734
Accrued commission expense	249,405	48,318
Bad debt reserve	51,516	34,275
Inventory reserve	29,647	25,140
Net operating loss carryovers	4,757,892	3,654,421
Restricted stock compensation expense	335,482	-
Non-Cash warrant/interest expense	3,949,109	843,321
Debt issuance expense	1,047,030	846,341
Stock compensation	840,281	661,296
Total deferred tax assets	11,381,370	6,198,846
Valuation allowance	(11,317,738)	(6,057,142)
Net deferred tax assets	63,632	141,704
Deferred tax liabilities:		
Depreciation	(101,691)	(179,774)
Amortization	38,059	38,070
Total deferred tax liabilities	(63,632)	(141,704)
Net deferred tax assets	\$ -	\$ -

The ultimate realization of deferred tax assets is dependent upon the existence or generation of taxable income in the periods when those temporary differences and net operating loss carryovers are deductible. Management considers the scheduled reversal of deferred tax liabilities, taxes paid in carryover years, projected future taxable income, available tax planning strategies, and other factors in making this assessment. Based on available evidence, management does not believe it is more likely than not that all of the deferred tax assets will be realized. Accordingly, the Company has established a valuation allowance equal to the net realizable deferred tax assets. The valuation allowance increased by \$5,260,596 and \$1,704,002 for the nine months ended September 30, 2010 and year ended December 31, 2009, respectively.

At September 30, 2010 and December 31, 2009, the Company had total domestic Federal and state net operating loss carryovers of approximately \$11,355,350 and \$8,652,555, respectively. Federal net operating loss carryovers expire at various dates between 2027 and 2029, while state net operating loss carryovers expire between 2024 and 2029.

Under the Tax Reform Act of 1986, as amended, the amounts of and benefits from net operating loss carryovers and research and development credits may be impaired or limited in certain circumstances. Events which cause limitations in the amount of net operating losses that the Company may utilize in any one year include, but are not limited to, a cumulative ownership change of more than 50%, as defined, over a three year period. The Company does not believe that such an ownership change has occurred in 2010 or 2009.

The 2007 through 2009 tax years remain open to examination by the Internal Revenue Service and the 2005 to 2009 tax years remain open to the Montana Department of Revenue. These taxing authorities have the authority to examine those tax years until the applicable statute of limitations expire.

(15) Employee Benefit Plans

The Company has a SIMPLE IRA retirement plan established for qualified employees. Qualified employees may defer their salary and the deferrals are matched up to 2% for September 30, 2010 and 3% for 2009 of eligible compensation by the Company. The plan covers substantially all full-time employees. Under the terms of the plan, participants may contribute up to the lower of \$10,500 of their salary or the statutorily prescribed limit to the plan. Employees are eligible the first January after their hire date. The Company made matching contributions during the nine months ended September 30, 2010 and 2009 of \$30,953 and \$38,953, respectively.

(16) Supplemental Disclosure of Cash Flow Information

Supplemental cash flow information is as follows:

	Nine Months Ended September 30,	
	2010	2009
Supplemental disclosure of cash flow information		
Cash paid during the period for:		
Interest	\$ 364,890	\$ 199,959
Income taxes	6,686	-
Non-cash investing and financing activities:		
Acquisition of treasury stock using notes payable	\$ -	\$ 76,566
Conversion of convertible notes payable into common stock	\$ 3,482,324	\$ 614,992

(17) Subsequent Events

On November 19, 2010, the Company entered into financing arrangement with two subsidiaries of Western Technology Investment (“WTI”), whereby WTI, through its subsidiaries, agreed to provide a credit facility which allows the Company to draw down \$2.5 million initially, and gives the Company the ability to draw down an additional \$2.5 million through April 30, 2011 provided the Company has achieved 90% of performance based milestones for the next two quarters. In addition, upon the mutual agreement of Bacterin and WTI, WTI has agreed to an additional commitment through December 31, 2011 of up to 25% of the next new round of equity financing or up to \$3.0 million. The credit facility is secured by the Company’s personal property and carries an all-in interest rate of 12.5%. Repayment of the initial \$2.5 million will be interest only for the first six months, with principal and interest for the subsequent 30 months. The WTI facility also allows the company to obtain separate accounts receivable financing. In connection with the financing, WTI also received warrants to purchase up to 375,000 shares of the Company’s common stock. The warrants have an exercise price of the lower of \$4.00 per share or the price at which shares of the Company’s stock are sold in the next qualified financing, if applicable prior to the date of exercise. The WTI warrants expire on April 30, 2018. WTI also has the right to receive additional warrants to purchase 125,000 shares of the Company’s common stock at the same exercise price if the Company draws down the second \$2.5 million tranche of the facility.

The Company also issued warrants to purchase a total of 429,629 shares of the Company’s common stock to a limited group of existing investors who exercised existing warrants. The new warrants have an exercise price of \$4.00 per share and expire on the fifth anniversary of the date of issuance. The Company received a total of \$980,000 from the cash payments of the exercise price of the existing warrants.

The Company also issued 30,000 shares to a former executive in connection with a settlement agreement and converted the former executive’s stock options to an equivalent number of warrants.

The Company has evaluated subsequent events from the balance sheet date through the date of this filing, and determined there are no additional events that require disclosure.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To The Board of Directors and Stockholders of
Bacterin International, Inc.
600 Cruiser Lane
Belgrade, MT 59714

We have audited the accompanying balance sheets of Bacterin International, Inc. (the Company) as of December 31, 2009 and 2008, and the related statements of operations, changes in stockholders' equity and cash flows for the years ended December 31, 2009 and 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Bacterin International, Inc. as of December 31, 2009 and 2008, and the results of its operations and its cash flows for the years ended December 31, 2009 and 2008, in conformity with accounting principles generally accepted in the United States of America.

Child, Van Wagoner & Bradshaw, PLLC
Salt Lake City, Utah
June 18, 2010

BACTERIN INTERNATIONAL, INC.
Balance Sheets
As of December 31, 2009 and 2008

	December 31,	
	2009	2008
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 54,155	\$ 238,895
Restricted cash and cash equivalents	-	1,000,000
Accounts receivable, net of allowance of \$81,803 and \$92,881, respectively	1,314,418	564,134
Notes receivable-trade	270,565	189,387
Notes receivable from stockholder	-	138,280
Inventories, net	5,000,713	4,158,690
Prepaid and other current assets	30,000	61,267
	6,669,851	6,350,653
Property & equipment, net	3,248,096	3,802,139
Intangible assets, net	554,268	548,772
Other assets	13,675	26,490
	\$ 10,485,890	\$ 10,728,054
LIABILITIES & STOCKHOLDERS' EQUITY		
Current Liabilities:		
Accounts payable	\$ 1,403,950	\$ 1,253,601
Accrued liabilities	463,633	253,538
Warrants derivative liability	75,231	-
Notes payable	1,126,690	1,000,000
Notes payable to stockholders	183,461	154,032
Current portion of capital lease obligations	85,071	190,989
Current portion of convertible notes payable (\$890,000 net of debt discount of \$69,213)	820,787	-
Current portion of long-term debt	1,202,574	1,286,571
	5,361,397	4,138,731
Capital lease obligation, less current portion	27,074	62,673
Convertible notes payable, less current portion	-	2,340,000
Long-term debt, less current portion	412,545	563,878
	5,801,016	7,105,282
Stockholders' Equity		
Preferred stock, \$.000001 par value; 15,000,000 shares authorized; No shares issued and outstanding	-	-
Common stock, \$.000001 par value; 85,000,000 shares authorized; 28,270,459 shares issued and 28,211,562 shares outstanding in 2009 and 25,359,067 shares issued and outstanding in 2008	28	25
Additional paid-in capital	22,238,747	16,974,340
Treasury stock, 58,897 shares	(76,566)	-
Retained deficit	(17,477,335)	(13,351,593)
	4,684,874	3,622,772
	\$ 10,485,890	\$ 10,728,054

See Accompanying Notes to Financial Statements.

BACTERIN INTERNATIONAL, INC.

**Statements of Operations
For the Years Ended December 31, 2009 and 2008**

	Twelve Months Ended December 31,	
	2009	2008
Revenues		
Tissue sales	\$ 7,101,357	\$ 8,031,611
Royalties and other	292,136	180,848
Total Revenue	7,393,493	8,212,459
Cost of tissue sales (excluding depreciation expense presented below)	2,318,142	1,522,658
Gross Profit	5,075,351	6,689,801
Operating Expenses		
General and administrative	5,916,776	3,750,273
Selling and marketing	1,281,932	429,170
Depreciation	661,847	646,846
Research and development	-	288,091
Stock Options / Restricted Stock Compensation expense (excluded from general and administrative expense)	837,350	460,974
Total Operating Expenses	8,697,905	5,575,354
Income (Loss) from Operations	(3,622,554)	1,114,447
Other Income (Expense)		
Interest income (expense)	(513,934)	(1,374,360)
Other income / expense	10,746	20,601
Total Other Income (Expense)	(503,188)	(1,353,759)
Net Income Before Benefit (Provision) for Income Taxes	(4,125,742)	(239,312)
Benefit (Provision) for Income Taxes		
Current	-	-
Deferred	-	-
Net Loss	\$ (4,125,742)	\$ (239,312)
Net income (loss) per share:		
Basic	\$ (.16)	\$ (.01)
Shares used in the computation:		
Basic	26,455,505	24,714,196

See Accompanying Notes to Financial Statements.

BACTERIN INTERNATIONAL, INC.
Statements of Changes in Stockholders' Equity
For the Years Ended December 31, 2009 and 2008

	Common Stock Shares	Common Stock Amount	APIC Options/ Warrants	Additional paid-in capital	Retained Deficit	Treasury Stock	Total stockholders' equity
Balance at December 31, 2007	24,077,350	\$ 24	\$ 2,220,747	\$ 12,074,561	\$ (13,112,281)	\$ -	\$ 1,183,051
Issuance of common stock, options and warrants:							
Private placement	1,141,717	1	348,117	930,396	-	-	1,278,514
Warrants issued on convertible debt	-	-	368,787	-	-	-	368,787
Stock based compensation	150,000	0	235,974	225,000	-	-	460,974
Warrants for debt/equity issuance	-	-	279,198	-	-	-	279,198
Warrants for short-term note guarantee	-	-	291,560	-	-	-	291,560
Net income	-	-	-	-	(239,312)	-	(239,312)
Balance at December 31, 2008	25,369,067	25	3,744,383	13,229,957	(13,351,593)	-	3,622,772
Issuance of common stock, options and warrants:							
Private placement	1,218,750	1	13,601	1,936,398	-	-	1,950,000
Conversion of notes to common stock	1,510,143	2	-	2,414,875	-	-	2,414,877
Purchase of treasury stock	(58,897)	-	-	-	-	(76,566)	(76,566)
Warrants for debt issuance	-	-	62,183	-	-	-	62,183
Stock-based compensation	172,500	0	561,355	275,995	-	-	837,350
Net loss	-	-	-	-	(4,125,742)	-	(4,125,742)
Balance at December 31, 2009	28,211,563	\$ 28	\$ 4,381,522	\$ 17,857,225	\$ (17,477,335)	\$ (76,566)	\$ 4,684,874

See Accompanying Notes to Financial Statements.

BACTERIN INTERNATIONAL, INC.

**Statements of Cash Flows
For the Years Ended December 31, 2009 and 2008**

	Year Ended December 31,	
	2009	2008
Operating activities:		
Net income (loss)	\$ (4,125,742)	\$ (239,312)
Noncash adjustments:		
Depreciation and amortization	707,926	685,715
Stock/option awards for services	837,350	460,974
Provision for losses on accounts receivable and inventory	(2,078)	94,171
Non-cash interest expense	183,078	939,545
(Gain) Loss on disposal of assets	(5,250)	1,051
Changes in operating assets and liabilities:		
Accounts receivable	(739,206)	346,984
Notes receivable-trade	(81,178)	(68,344)
Inventories	(851,023)	(2,259,125)
Prepaid and other current assets	44,082	(1,385)
Accounts payable	150,349	582,756
Accrued liabilities	210,096	(41,022)
Net cash provided by (used in) operating activities	(3,671,596)	502,008
Investing activities:		
Purchases of property and equipment	(42,089)	(649,507)
Note receivable from stockholder	138,280	(138,280)
Intangible asset additions	(51,576)	(167,905)
Proceeds on sale of fixed assets	5,250	2,400
Acquisition of entity under common control	-	1,158
Net cash used by investing activities	49,865	(952,134)
Financing activities:		
Restricted cash	-	(1,000,000)
Release of restriction on cash	1,000,000	-
(Payments on) long-term debt	(235,330)	(2,018,536)
Proceeds from issuance of convertible debt	550,000	2,340,000
(Payments on) notes payable	(500,000)	-
Proceeds from notes payable	926,690	1,000,000
(Payments on) capital leases	(207,232)	(216,092)
Proceeds from issuance of common stock	1,950,000	1,278,514
Payments on notes payable to shareholders	(47,137)	(838,717)
Net cash provided by financing activities	3,436,991	545,169
Increase (decrease) in cash	(184,740)	95,043
Cash and cash equivalents at beginning of period	238,895	143,852
Cash and cash equivalents at end of period	\$ 54,155	\$ 238,895

Supplemental disclosure of cash flow information (see note 19)

See Accompanying Notes to Financial Statements.

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements Years ended December 31, 2009 and 2008

(1) Business Description and Summary of Significant Accounting Policies

Business Description

Bacterin International, Inc. (“the “Company” or “Bacterin”) develops, manufactures and markets biologics products to domestic and international markets and is a leader in the field of biomaterials research, device development and commercialization. Bacterin’s proprietary methods optimize the growth factors in human allografts to create the ideal stem cell scaffold and promote bone and other tissue growth. These products are used in a variety of applications including enhancing fusion in spine surgery, relief of back pain with a facet joint stabilization, promotion of bone growth in foot and ankle surgery, promotion of skull healing following neurosurgery and cartilage regeneration in knee and other joint surgeries.

Bacterin’s device division develops anti-microbial coatings to inhibit infection based upon proprietary knowledge of the phenotypical changes made by microbes as they sense and adapt to changes in their environment. Bacterin develops, employs, and licenses bioactive coatings for various medical device applications. Bacterin’s strategic coating initiatives include the inhibition of biofilm formation, local (as opposed to systemic) drug delivery, local (as opposed to systemic) pain management, and anti-thrombotic factors for medical device applications.

Certain Risks and Concentrations

The Company's revenue is derived principally from the sale of its medical products, coatings and device implants. The markets in which the Company competes are highly competitive and rapidly changing. Significant technological advances, changes in customer requirements, or the emergence of competitive products with new capabilities or technologies could adversely affect the Company's operating results. The Company's business could be harmed by a decline in demand for, or in the prices of, its products or as a result of, among other factors, any change in pricing or distribution model, increased price competition, changes in government regulations or a failure by the Company to keep up with technological change. Further, a decline in available tissue donors could have an adverse impact on the business.

Financial instruments subjecting the Company to concentrations of credit risk are accounts and notes receivable. The Company maintains cash, cash equivalents, and short-term investments with various domestic financial institutions. From time to time, the Company's cash balances with its financial institutions may exceed insurance limits.

The Company's customers are worldwide with approximately 91% of sales in the United States in 2009 and 2008. One customer accounted for 12% of revenue in 2009. One customer accounted for 37% and another customer accounted for 10.2% of the Company's revenue in 2008. No single customer represented more than 10% of accounts receivable at December 31, 2009 and one customer represented 10.4% of accounts receivable at December 31, 2008.

Revenue by geographical region is as follows:

	Year Ended December 31,	
	2009	2008
United States	\$ 6,708,027	\$ 7,485,988
Rest of World	685,466	726,471
	<u>\$ 7,393,493</u>	<u>\$ 8,212,459</u>

Use of Estimates

The preparation of the financial statements requires management of the Company to make a number of estimates and assumptions relating to the reported amount of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the period; the carrying amount of property and equipment and intangible assets; valuation allowances for receivables and deferred income tax assets; and estimates of expected term and volatility in determining stock-based compensation expense. Actual results could differ from those estimates.

BACTERIN INTERNATIONAL, INC.

**Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008**

(1) Business Description and Summary of Significant Accounting Policies (Continued)

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity date of three months or less to be cash equivalents. Cash equivalents are recorded at cost, which approximates market value. As of December 31, 2008, a \$1,000,000 certificate of deposit was pledged as collateral for the two \$500,000 notes payable to Flathead Bank. The certificate of deposit was released as collateral during 2009.

Accounts Receivable and Notes Receivable

Accounts receivable represents amounts due from customers for which revenue has been recognized. Normal terms on trade accounts receivable are net 30 days and some customers are offered discounts for quick pay. Notes receivable include amounts due from West Coast Tissue Service, a supplier of donors to the Company. The Company performs credit evaluations when considered necessary, but generally does not require collateral to extend credit.

The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing receivables. The Company determines the allowance based on factors such as historical collection experience, customer's current creditworthiness, customer concentration, age of accounts receivable balance and general economic conditions that may affect a customer's ability to pay. Actual customer collections could differ from estimates. Account balances are charged to the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. Provisions to the allowance for doubtful accounts are charged to expense. The Company does not have any off-balance sheet credit exposure related to its customers.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined using the specific identification method and includes materials, labor and overhead.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation and amortization is computed using the straight-line method over the estimated useful lives of the assets, generally three to seven years for computers and equipment, and 30 years for buildings. Repairs and maintenance are expensed as incurred.

Intangible Assets

Intangible assets include costs to acquire and protect Company patents and are carried at cost less accumulated amortization. The Company amortizes these assets on a straight-line basis over their estimated useful lives of 15 years.

Grants

As part of the Company's efforts to build the development of new technologies, tissue donation and expansion of tissue supply, the Company, may, from time-to-time either provide or receive grants. These grants receipts are used for research and development efforts.

BACTERIN INTERNATIONAL, INC.

**Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008**

(1) Business Description and Summary of Significant Accounting Policies (Continued)

Revenue Recognition

Revenue is recognized when all of the following criteria are met: a) the Company has entered into a legally binding agreement with the customer; b) the products or services have been delivered; c) the Company's fee for providing the products and services is fixed and determinable; and d) collection of the Company's fee is probable.

The Company's policy is to record revenue net of any applicable sales, use, or excise taxes. If an arrangement includes a right of acceptance or a right to cancel, revenue is recognized when acceptance is received or the right to cancel has expired.

The Company sells to certain customers under consignment arrangements whereby the Company ships product to be stored by the customer. The customer is required to report the use to the Company and upon such notice the Company invoices the customer.

Research and development services revenue is recognized as performed, based on the incurrence of qualifying costs or achievement of milestones as prescribed in the arrangement.

Research and Development

Research and development costs, which are principally related to internal costs for the development of new technologies and processes for tissue and coatings, are expensed as incurred.

Income Taxes

The Company records income taxes under the asset and liability method as prescribed under FASB Accounting Standards Codification ASC 740, *Accounting for Income Taxes*. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. When applicable, a valuation allowance is established to reduce any deferred tax asset when it is determined that it is more likely than not that some portion of the deferred tax asset will not be realized.

Impairment of Long-Lived Assets

Long-lived assets, including intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the estimated fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. No impairments of long-lived assets have been identified in any of the periods presented.

Net Income (Loss) Per Share

A reconciliation of the denominator used in the calculation of basic and diluted net income (loss) per share is as follows:

Net Income (Loss) Per Share:

	<u>Year Ended December 31,</u>	
	<u>2009 (restated)</u>	<u>2008</u>
Net Income (Loss)	(4,125,742)	\$ (239,312)
Weighted average common shares outstanding for basic net income (loss) per share	26,455,505	24,714,196

The weighted average shares and all share amounts have been retroactively adjusted to reflect the Company's 1 for 2 reverse stock split on June 30, 2010. Dilutive earnings per share are not reported as the effect of including 6,837,391 and 5,243,058 outstanding stock options and warrants in 2009 and 2008, respectively, would be anti dilutive resulting in a lower net loss per share.

BACTERIN INTERNATIONAL, INC.

**Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008**

(1) Business Description and Summary of Significant Accounting Policies (Continued)

Stock-Based Compensation

On January 1, 2006, the Company adopted the provisions of ASC 718-40, for its stock-based compensation plans. Under ASC 718, stock-based compensation costs are recognized based on the estimated fair value at the grant date for all stock-based awards. The Company estimates grant date fair values using the Black-Scholes-Merton option pricing model, which requires assumptions of the life of the award and the stock price volatility over the term of the award. The Company records compensation cost of stock-based awards using the straight line method, which is recorded into earnings over the vesting period of the award. Pursuant to the income tax provisions included in ASC 718-740, the Company has elected the "short cut method" of computing its hypothetical pool of additional paid-in capital that is available to absorb future tax benefit shortfalls.

Comprehensive Income (Loss)

Comprehensive loss includes net income or loss, as well as other changes in stockholders' equity that result from transactions and economic events other than those with stockholders. The Company currently does not have any transactions that qualify for accounting and inclusion as other comprehensive income (loss).

Fair Value of Financial Instruments

The carrying values of financial instruments, including accounts receivable, notes receivable, accounts payable and other accrued expenses, approximate their fair values.

(2) Notes Receivable

Notes receivable consist of the following:

	Year Ended December 31,	
	2009	2008
West Coast Tissue Service, Inc.	\$ 270,565	\$ 189,387

West Coast Tissue Service, Inc. is a non-profit corporation organized under Section 501(c)(3) of the Internal Revenue Code. The Company has contracted with West Coast Tissue Service to acquire their donor tissue for use in the Company's production. If the Company were unable to continue to receive donor tissue, it may have a material effect on Bacterin's financial statements and results of operations. The notes are non-interest bearing and are expected to be repaid during 2010.

(3) Inventories

Inventories consist of the following:

	December 31,	
	2009	2008
Raw materials	\$ 178,754	\$ 145,186
Raw materials	1,100,252	1,291,179
Work in process	1,282,080	735,916
Finished goods	2,499,627	2,037,409
	5,060,713	4,209,690
Reserve	60,000	51,000
	\$ 5,000,713	\$ 4,158,690

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008

(4) Property and Equipment, Net

Property and equipment, net are as follows:

	December 31,	
	2009	2008
Buildings	\$ 1,613,628	\$ 1,590,475
Equipment	2,542,855	2,553,053
Computer equipment	235,566	202,035
Computer software	140,071	127,867
Furniture and fixtures	75,007	75,007
Leasehold improvements	898,248	881,938
Vehicles	101,110	101,110
Total cost	5,606,485	5,551,485
Less: accumulated depreciation	(2,358,389)	(1,729,346)
	<u>\$ 3,248,096</u>	<u>\$ 3,802,139</u>

Maintenance and repairs expense for the years ended December 31, 2009 and 2008, was \$43,328 and \$67,863, respectively. Depreciation expense related to property, plant and equipment, including property under capital lease, for the years ended December 31, 2009 and 2008 was \$661,847 and \$508,392, respectively. Depreciation included in inventory and cost of goods sold for the years ended December 31, 2009 and 2008 was \$192,500 and \$251,076, respectively.

(5) Intangible assets

Bacterin has been issued various patents with regards to processes for their products.

The following table sets forth information regarding intangible assets:

	Intellectual Property
As of December 31, 2008:	
Gross carrying value	\$ 658,895
Accumulated amortization	(110,123)
Net carrying value	<u>\$ 548,772</u>
As of December 31, 2009:	
Gross carrying value	\$ 710,471
Accumulated amortization	(156,203)
Net carrying value	<u>\$ 554,268</u>
Aggregate amortization expense:	
2008	\$ 38,889
2009	\$ 46,080
Estimated amortization expense:	
2010	\$ 47,364
2011	\$ 47,364
2012	\$ 47,364
2013	\$ 47,364
2014	\$ 47,364

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008

(6) Accrued Liabilities

Accrued liabilities consist of the following:

	December 31,	
	2009	2008
Credit cards	\$ 10,764	\$ 16,182
Accrued interest payable	45,382	112,536
Wages payable	377,484	40,439
Other accrued expenses	-	84,381
	<u>\$ 463,630</u>	<u>\$ 253,538</u>

(7) Notes Payable

Notes payable consist of the following:

	December 31,	
	2009	2008
Note payable Kevin Daly	\$ 200,000	\$ -
Note payable Hamilton Group	426,693	-
Notes payable Flathead Bank	500,000	1,000,000
	<u>\$ 1,126,693</u>	<u>\$ 1,000,000</u>

The note payable to Kevin Daly was a 30-day note payable bearing interest at 15% and was repaid in January 2009. The notes payable Flathead Bank are 6.5% short-term notes with monthly payments of \$3,728 and maturing on June 25, 2010. The notes payable Hamilton Group is a note due under a factoring contract, secured by accounts receivable.

(8) Convertible Notes Payable

	December 31,	
	2009 (restated)	2008
12% convertible note payable, maturing in 2010, extendable by the Company for two additional three month terms, secured by intellectual property and the raw material inventory, convertible into the securities offered in a future qualified offering, defined as the sale of debt or equity securities generating aggregate gross proceeds of at least \$7,000,000, equal to the lower of \$0.80 per share or ninety percent (90%) of the per share price of the securities sold to investors in the Qualified Financing if one occurs or convertible anytime into common stock at \$1.00 per share, restrictive covenants were in compliance as of December 31, 2009 (net of debt discount). The debt discount is the value of the warrants that were issued.	\$ 480,787	\$ -
10% convertible notes payable, maturing in 2010, secured by all assets after subordination to other creditors with pre-existing rights to those assets, convertible into shares of common stock – notes were repaid in January and February 2010	340,000	2,340,000
	<u>\$ 820,787</u>	<u>\$ 2,340,000</u>

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008

(9) Long-Term Debt

Long-term debt consists of the following:

	December 31,	
	<u>2009</u>	<u>2008</u>
6.5% loan payable to Flathead Bank, \$7,278 monthly payments including interest, maturing June 25, 2010, secured by building	\$ 976,218	\$ 993,996
8.50% loan payable to Flathead Bank, \$9,329 monthly payments, including interest, maturing in 2012, secured by equipment	293,052	367,376
5.00% loan payable to the City of Belgrade, \$3,653 monthly payments, including interest, maturing in 2012, secured by equipment	141,215	149,158
5.00% loan payable to the City of Belgrade, \$6,982 monthly payments, including interest, maturing in 2010, secured by equipment	39,044	118,557
5.00% loan payable to Valley Bank of Belgrade, \$4,140 monthly payments including interest, secured by building	165,590	187,303
8.00% loan payable to Valley Bank of Belgrade, \$4,140 monthly payments including interest, secured by building	-	34,059
	<u>1,615,119</u>	<u>1,850,449</u>
Less: Current portion	(1,202,574)	(1,286,571)
	<u>\$ 412,545</u>	<u>\$ 563,878</u>

The following is a summary of maturities due on the long-term debt as of December 31, 2009:

2010	\$ 1,202,574
2011	190,238
2012	180,029
2013	42,278
Thereafter	<u>-</u>
Total	\$ 1,615,119

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008

(10) Capital Leasing Transactions

Future minimum capital and operating lease payments are as follows:

	December 31,	
	2009	2008
2009	\$ -	\$ 212,019
2010	93,752	39,519
2011	28,920	30,055
2012	-	-
Thereafter	-	-
Total minimum lease payments	122,672	281,593
Less interest portion of payments	(10,527)	(27,931)
Present value of future minimum lease payments	112,145	253,662
Less current maturities of capital lease obligation	(85,071)	(190,989)
Capital lease obligation	<u>\$ 27,074</u>	<u>\$ 62,673</u>

(11) Notes Payable to Shareholders

Notes payable to shareholders consist of the following:

	December 31,	
	2009	2008
Note payable shareholders	\$ 76,969	\$ -
Note payable Mitch Godfrey	106,492	154,032
	<u>\$ 183,461</u>	<u>\$ 154,032</u>

During 2009, the Company repurchased stock from two shareholders pursuant to a tender process. These notes were given in payment for the stock and accrued interest at six percent during the initial term with a maturity of September 29, 2009. When the notes were not paid on the initial maturity date, they were automatically extended for an additional four months with a new interest rate of eight percent. If not paid at the second maturity date, these notes will automatically extend for an additional four months at an interest rate of ten percent. The note payable to Mitch Godfrey does not have specified payment terms and bears 6% interest per annum.

(12) Related Party Transaction – ReGenCell, Inc.

ReGenCell, Inc. is a Montana corporation owned 100% by Guy Cook. On January 1, 2008, Bacterin International, Inc. acquired all of the assets of ReGenCell, Inc.:

Cash	\$ 1,158
Employee receivable – Guy Cook	32,700
Employee receivable – Mitchell Godfrey	17,763
Employee receivable – other	31,267
Fixed assets (at cost)	88,975
Accounts receivable – Bacterin International, Inc.	30,000
Notes receivable – Bacterin International, Inc.	59,055
Total assets purchased	<u>\$ 260,918</u>
Bacterin assumed Valley Bank note payable	(327,466)
Bacterin assumed miscellaneous payables	(2,200)
Bacterin reduced its payable to Guy Cook	68,748
	<u>\$ 0</u>

Guy Cook agreed to reduce his note receivable from Bacterin by the difference between the liabilities assumed and the assets purchased (\$68,748). Upon acquisition of the employee receivables, Bacterin reduced its notes payable to Guy Cook and Mitchell Godfrey by \$32,700 and \$17,763, respectively.

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008

(13) Stock-Based Compensation

The Company's 2004 Stock Incentive Plan provides for stock awards, including options and performance stock awards, to be granted to employees, consultants, independent contractors, officers and directors. Awards are granted at the discretion of the Company's board of directors, at an exercise price and term determined by the board. However, exercise prices are not less than the fair market value at the date of grant, and the term of the options is not greater than ten years. Options generally vest annually over a period of five years. At December 31, 2009, the Company had approximately 6 million shares available for issuance under the equity plan.

Compensation expense recognized in the statement of operations for the year ended December 31, 2009 and 2008 is based on awards ultimately expected to vest and reflects an estimate of awards that will be forfeited. ASC 718 requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Compensation expense recognized and capitalized for the years ended December 31, 2009 and 2008 was \$597,355 and \$235,974 respectively.

The estimated fair value of stock options granted is done using the Black-Sholes method applied to individual grants. Key assumptions used to estimate the fair value of stock awards are as follows:

Risk Free Rate: The risk-free rate is determined by reference to U.S. Treasury yields at or near the time of grant for time periods similar to the expected term of the award.

Expected Term: The Company does not have adequate history to estimate an expected term of stock-based awards, and accordingly, uses the short-cut method as prescribed by Staff Accounting Bulletin 107 to determine an expected term.

Volatility: Since the Company's stock is not publicly-traded, the Company estimates expected volatility based on peer-companies as prescribed by ASC 718.

Dividend Yield: The dividend yield assumption is based on the Company's history and expectation of dividend payouts and was 0% as of December 31, 2009 and 2008.

Activity under the Company's stock option plans was as follows:

	2009		2008	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding at Jan. 1,	1,999,163	\$ 1.18	1,707,372	\$ 1.10
Granted	1,497,500	1.52	692,042	\$ 1.50
Exercised		.10		
Cancelled or expired	(143,167)	1.18	(400,251)	1.74
Outstanding at December 31,	3,353,496	\$ 1.34	1,999,163	\$ 1.18
Exercisable at December 31,	1,503,451	\$ 1.12	969,956	\$.88

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008

(14) Stock-Based Compensation (continued)

The following table summarizes information concerning non-vested option transactions for the year ended December 31, 2009:

Nonvested Options	Shares	Weighted Average Grant Date Fair Value Per Share
Nonvested at January 1, 2009	1,029,208	\$ 1.22
Granted	1,497,500	1.52
Vested	(586,069)	1.46
Forfeited	(90,593)	1.54
Nonvested at December 31, 2009	<u>1,850,046</u>	<u>\$ 1.50</u>

From time to time the Company may grant stock options to consultants. The Company accounts for consultant stock options in accordance with ASC 505-50. Compensation expense for the grant of stock options to consultants is determined based on the estimated fair value of the warrants at the measurement date as defined in ASC 505-50 and is recognized over the vesting period.

In connection with private placements of convertible debt, short-term debt, and common stock, the Company issued warrants to purchase shares of common stock at an exercise price of between \$1.113 and \$2.50 per share. During 2009, 40,000 warrants were issued with private placements of common stock, 90,000 warrants were issued with the placement of short-term debt and 110,000 warrants were issued with the placement of convertible notes. In 2008, 695,304, 50,000 and 488,144 warrants were issued in connection with convertible debt, short-term debt and common stock, respectively. The warrants were exercisable five to seven years from the date of grant. Warrants issued with common stock were recorded as additional paid in capital at the estimated fair market value of \$13,601 in 2009 and \$348,117 in 2008. The warrants issued with convertible debt and short-term loans were recorded as interest expense over the term of the debt at the estimated fair value of \$62,183 in 2009 and \$939,545 in 2008 using the following assumptions:

	2009	2008
Value of underlying common stock (per share)	\$ 1.60	\$ 1.50
Risk free rate	2.20%	1.87%
Expected term	2.5-5 years	5-7 years
Dividend yield	0%	0%
Volatility	44-61%	86%

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008

(15) Commitments and Contingencies

Operating Leases

The Company leases office facilities under a non-cancelable operating lease agreement with an expiration date in 2013. The Company has the option to extend the lease for another ten year term and has right of first refusal on any sale. The Company leases additional office facilities under month-to-month arrangements. Future minimum payments for the next five years and thereafter as of December 31, 2009, under these leases, are as follows:

2010	\$ 120,000
2011	\$ 120,000
2012	\$ 120,000
2013	\$ 72,258
Thereafter	\$ -

Rent expense was \$162,766 and \$124,200 in 2009 and 2008, respectively. Rent expense is determined using the straight-line method of the minimum expected rent paid over the term of the agreement. The Company has no contingent rent agreements.

Warranties and Indemnification

The Company's arrangements generally include certain provisions for indemnifying customers against liabilities if its products or services infringe a third-party's intellectual property rights. To date, the Company has not incurred any material costs as a result of such indemnifications and has not accrued any liabilities related to such obligations in the accompanying financial statements.

The Company has also agreed to indemnify its directors and executive officers for costs associated with any fees, expenses, judgments, fines and settlement amounts incurred by any of these persons in any action or proceeding to which any of those persons is, or is threatened to be, made a party by reason of the person's service as a director or officer, including any action by the Company, arising out of that person's services as the Company's director or officer or that person's services provided to any other company or enterprise at the Company's request.

Litigation

From time to time, the Company is involved in legal proceedings arising in the ordinary course of business. The Company believes that the resolution of these matters will not have a material effect on the Company's financial position, results of operations or liquidity. Legal fees are charged to expense as incurred, unless the probability of incurring a loss is high and the amount can be reasonably estimated, in which case the estimated loss is accrued.

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008

(16) Income Taxes

The components of income (loss) before provision for income taxes consist of the following:

	Year Ended December 31,	
	2009 (restated)	2008
United States	\$ (4,125,742)	\$ (239,312)
	\$ (4,125,742)	\$ (239,312)

The components of the income tax provision are as follows:

	Year Ended December 31,	
	2009	2008
Current:		
Federal	\$ -	\$ -
State	-	-
Total current	-	-
Deferred:		
Federal	-	-
State	-	-
Total deferred	-	-
	\$ -	\$ -

The reconciliation of income tax attributable to operations computed at the U.S. Federal statutory income tax rate of 35% to income tax expense is as follows:

	Year Ended December 31,	
	2009	2008
Statutory Federal tax rate	\$(1,444,010)	\$ (83,759)
Valuation allowance	1,733,385	94,532
State income taxes, net of Federal benefit	(289,452)	(16,513)
Nondeductible meals & entertainment expense	24,301	5,740
Other	-	-
	\$ -	\$ -

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008

(17) Income Taxes (continued)

Deferred tax components are as follows:

	At December 31,	
	2009	2008
Deferred tax assets:		
Accrued liability for vacation	\$ 85,734	\$ 35,355
Accrued commission expense	48,318	-
Bad debt reserve	34,275	38,917
Inventory reserve	25,140	21,369
Net operating loss carryovers	3,654,421	2,401,066
Stock warrant expense	843,321	843,321
Debt issuance expense	817,461	766,977
Stock compensation	661,296	411,005
Total deferred tax assets	6,169,966	4,518,010
Valuation allowance	(6,028,262)	(4,324,140)
Net deferred tax assets	141,704	193,870
Deferred tax liabilities:		
Depreciation	(179,774)	(232,478)
Amortization	38,070	38,608
Total deferred tax liabilities	(141,704)	(193,870)
Net deferred tax assets	\$ -	\$ -

The ultimate realization of deferred tax assets is dependent upon the existence, or generation, of taxable income in the periods when those temporary differences and net operating loss carryovers are deductible. Management considers the scheduled reversal of deferred tax liabilities, taxes paid in carryover years, projected future taxable income, available tax planning strategies, and other factors in making this assessment. Based on available evidence, management does not believe it is more likely than not that all of the deferred tax assets will be realized. Accordingly, the Company has established a valuation allowance equal to the net realizable deferred tax assets. The valuation allowance increased by \$1,704,122 and \$93,399 in 2009 and 2008, respectively.

At December 31, 2009 and 2008, the Company had total domestic Federal and state net operating loss carryovers of approximately \$8,652,555 and \$5,758,769, respectively. Federal net operating loss carryovers expire at various dates between 2027 and 2029, while state net operating loss carryovers expire between 2024 and 2029.

Under the Tax Reform Act of 1986, as amended, the amounts of and benefits from net operating loss carryovers and research and development credits may be impaired or limited in certain circumstances. Events which cause limitations in the amount of net operating losses that the Company may utilize in any one year include, but are not limited to, a cumulative ownership change of more than 50%, as defined, over a three year period. The Company does not believe that such an ownership change has occurred in 2009 or 2008.

The 2006 through 2008 tax years remain open to examination by the Internal Revenue Service and the 2004 to 2008 tax years remain open to the Montana Department of Revenue. These taxing authorities have the authority to examine those tax years until the applicable statute of limitations expire.

BACTERIN INTERNATIONAL, INC.

Notes to Financial Statements (continued)
Years ended December 31, 2009 and 2008

(18) Employee Benefit Plans

The Company has a SIMPLE IRA retirement plan established for qualified employees. Qualified employees may defer their salary and the deferrals are matched up to 3% of eligible compensation by the Company. The plan covers substantially all full-time employees. Under the terms of the plan, participants may contribute up to the lower of \$10,500 of their salary or the statutorily prescribed limit to the plan. Employees are eligible the first January after their hire date. The Company made matching contributions during 2009 and 2008 of \$131,709 and \$46,993, respectively.

(19) Supplemental Disclosure of Cash Flow Information

Supplemental cash flow information is as follows:

	Year Ended December 31,	
	2009	2008
Supplemental disclosure of cash flow information		
Cash paid during the period for:		
Interest	\$ 276,074	\$ 308,881
Income taxes	-	-
Non-cash investing and financing activities:		
Acquisition of receivables/equipment with assumed debt (see note 12)	\$ -	\$ 259,760
Acquisition of property and equipment under capital lease	\$ 65,715	\$ -
Acquisition of treasury stock using notes payable	\$ 76,566	\$ -
Conversion of convertible notes payable into common stock	\$ 2,000,000	\$ -

(20) Subsequent Events

In January and February 2010, the Company issued an additional \$2,450,000 of convertible notes on the same terms as the \$550,000 of convertible notes issued in December 2009. The Company also renegotiated the convertible note agreements issued in December 2009 to include additional warrants as incentives for entering into these agreements so that all note agreements issued have the same terms and incentives.

In January and February 2010, the Company repaid all \$340,000 of the 2008 convertible notes payable that were outstanding as of December 31, 2009.

11,250,597 Shares



Common Stock

PROSPECTUS

, 2010

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. *Other Expenses of Issuance and Distribution.*

The following table sets forth the expenses payable by us in connection with the offering. All such expenses are estimates except for the SEC registration fee.

SEC registration fee	\$ 4,587.83	*
Accounting fees and expenses		*
Printing and engraving expenses		*
Legal fees		*
Miscellaneous expenses		*
Total	<u>\$</u>	<u>*</u>

* To be filed by amendment.

Item 14. *Indemnification of Directors and Officers.*

Section 145 of the Delaware General Corporation Law, or DGCL, permits, in general, a Delaware corporation to indemnify any person who was or is a party to any proceeding (other than an action by, or in the right of, the corporation) by reason of the fact that he or she is or was a director or officer of the corporation, or served another entity in any capacity at the request of the corporation, against liability incurred in connection with such proceeding, including the estimated expenses of litigating the proceeding to conclusion and the expenses actually and reasonably incurred in connection with the defense or settlement of such proceeding, including any appeal thereof, if such person acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, in criminal actions or proceedings, additionally had no reasonable cause to believe that his or her conduct was unlawful. Section 145(e) of the DGCL permits the corporation to pay such costs or expenses in advance of a final disposition of such action or proceeding upon receipt of an undertaking by or on behalf of the director or officer to repay such amount if he or she is ultimately found not to be entitled to indemnification under the DGCL. Section 145(f) of the DGCL provides that the indemnification and advancement of expense provisions contained in the DGCL shall not be deemed exclusive of any rights to which a director or officer seeking indemnification or advancement of expenses may be entitled.

Our certificate of incorporation provides that no director of the company will be personally liable to the company or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the company or our stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for the improper declaration of dividends or redemption of shares of capital stock in violation of Delaware law, or (iv) for any transaction from which the director derived an improper personal benefit.

The above discussion of our certificate of incorporation, bylaws, and Section 145 of the DGCL is only a summary and is qualified in its entirety by the full text of each of the foregoing.

We have been advised that it is the position of the SEC that insofar as the foregoing provisions may be invoked to disclaim liability for damages arising under the Securities Act of 1933, as amended, that such provisions are against public policy as expressed in the Securities Act and are therefore unenforceable.

Item 15. *Recent Sales of Unregistered Securities.*

On June 30, 2010, at the closing of the Reverse Merger, we issued an aggregate of 28,257,133 shares of our common stock to the former stockholders of Bacterin. The shares of our common stock issued to former holders of Bacterin's common stock in connection with the exchange transaction were exempt from registration under Section 4(2) of the Securities Act of 1933 as a sale by an issuer not involving a public offering and under Regulation D promulgated pursuant to the Securities Act of 1933. These shares of common stock were not registered under the Securities Act, or the securities laws of any state, and were offered and sold in reliance on the exemption from registration afforded by Section 4(2) and Regulation D (Rule 506) under the Securities Act and corresponding provisions of state securities laws, which exempts transactions by an issuer not involving any public offering. Such securities may not be offered or sold in the United States absent registration or an applicable exemption from the registration requirements and certificates evidencing such shares contain or, upon issuance will contain, a legend stating the same.

Private Placement.

Concurrently with the closing of the Reverse Merger, we completed an initial closing of a private placement to selected qualified investors of shares of our common stock at a purchase price of \$1.60 per share and detachable warrants to purchase one-quarter share of our common stock for each share of our common stock purchased in the private placement (at an exercise price of \$2.50 per share). In total, we sold 4,934,533 shares of our common stock and warrants to purchase 1,233,646 shares of common stock as part of this initial closing. We received gross proceeds of \$7,508,329 in consideration for the sale of the shares of common stock and warrants, which consisted of (i) \$4,026,000 in cash from investors in the private placement and (ii) \$3,482,329 from note holders in two earlier Bacterin bridge financings (conducted to fund working capital and capital expenditures during the months prior to the Reverse Merger) who converted their outstanding principal and interest into the private placement at a 10% discount to the purchase price, being \$1.44 per share, and received identical warrant coverage as the cash investors except that the exercise price of the converting note holders' warrants is \$2.25 per share, a 10% discount to the exercise price of the warrants received by the cash investors. The note holders in the bridge financings also received warrants to purchase 1,482,256 shares of our common stock and our placement agent received warrants to purchase 328,125 shares of our common stock as part of our bridge financing.

In the second and final closing of this private placement on July 30, 2010, we sold a total of 1,102,500 additional shares of our common stock together with additional warrants to purchase an aggregate of 275,625 shares of our common stock for total gross cash proceeds of \$1,764,000.

Our placement agents received an aggregate of \$463,200 in cash fees in connection with the private placement (\$322,080 from the initial closing and \$141,120 from the second and final closing) and were reimbursed for their out-of-pocket-expenses. In addition, the placement agents received an aggregate of 106,217 shares of our common stock (84,167 shares from the initial closing and 22,050 shares from the second and final closing) and warrants to purchase 361,875 shares of our common stock (251,625 shares from the initial closing and 110,250 shares from the second and final closing) at an exercise price of \$1.60 per share.

Following the private placement transaction, the Company has permitted an additional \$400,000 in principal amount outstanding from the Bacterin bridge financings to convert into 280,411 shares of the Company's common stock and warrants to purchase 70,103 shares of the Company's common stock on the same terms as if such debt had actually converted in the private placement transaction. All other outstanding debt from those bridge financings that did not convert has been repaid.

In connection with the closing of the Reverse Merger, the Company repurchased 4,319,404 shares of its common stock from one of its stockholders for aggregate consideration of \$100, as well as certain other good and valuable consideration, and Bacterin repurchased 77,029 shares of its common stock from certain of its stockholders for aggregate consideration of \$123,245. Immediately after these repurchases, all of these shares were cancelled.

On August 6, 2010, we paid certain of Bacterin's former stockholders, who held approximately 743,940 shares of Bacterin common stock in the aggregate (or the equivalent of 371,970 shares of our common stock post-Reverse Merger), the fair value for such shares in connection with the exercise of their dissenters' rights. As a result, and pursuant to the terms of the agreement governing the Reverse Merger, the former Bacterin stockholders (excluding the dissenting shareholders) are entitled to be issued 371,970 shares of our common stock (*i.e.*, the same number of shares that the dissenting stockholders would have received had they not exercised their dissenters rights) in proportion to such stockholders' pre-Reverse Merger share holding percentages in Bacterin.

On November 19, 2010, the Company entered into financing arrangement with two subsidiaries of Western Technology Investment ("WTI"), whereby WTI, through its subsidiaries, agreed to provide a credit facility which allows the Company to draw down \$2.5 million initially, and gives the Company the ability to draw down an additional \$2.5 million through April 30, 2011 provided the Company has achieved 90% of performance based milestones for the next two quarters. In addition, upon the mutual agreement of Bacterin and WTI, WTI has agreed to an additional commitment through December 31, 2011 of up to 25% of the next new round of equity financing or up to \$3.0 million. The credit facility is secured by the Company's personal property and carries an all-in interest rate of 12.5%. Repayment of the initial \$2.5 million will be interest only for the first six months, with principal and interest for the subsequent 30 months. The WTI facility also allows the company to obtain separate accounts receivable financing. In connection with the financing, WTI also received warrants to purchase up to 375,000 shares of the Company's common stock. The warrants have an exercise price of the lower of \$4.00 per share or the price at which shares of the Company's stock are sold in the next qualified financing, if applicable prior to the date of exercise. The WTI warrants expire on April 30, 2018. WTI also has the right to receive additional warrants to purchase 125,000 shares of the Company's common stock at the same exercise price if the Company draws down the second \$2.5 million tranche of the facility.

The Company also issued warrants to purchase a total of 489,710 shares of the Company's common stock to a limited group of existing investors who exercised existing warrants. The new warrants have an exercise price of \$4.00 per share and expire on the fifth anniversary of the date of issuance. The Company received a total of \$1,111,374 from the cash payments of the exercise price of the existing warrants.

The Company also issued 30,000 shares to a former executive in connection with a settlement agreement and converted the former executive's stock options to an equivalent number of warrants.

Transaction Fees and Use of Proceeds.

We have assumed Bacterin's agreement to pay the lead placement agent, Middlebury Securities, LLC, and any sub-placement agents, in total, (i) a cash fee equal to 8% of the aggregate gross cash proceeds received in the private placement, (ii) warrants to purchase that number of shares of our common stock equal to 10% of the shares of common stock purchased in the private placement, at an exercise price of \$1.60 per share, and (iii) shares of our common stock equal to 2% of the shares of common stock purchased in the private placement for cash (less cash invested by Guy Cook, a director and our President and Chief Financial Officer) and acquired through the conversion of \$3,482,329 in convertible debt (principal and accrued and unpaid interest). Middlebury Securities, LLC, and any sub-placement agents, received an aggregate of \$463,200 in cash fees in connection with the private placement (\$322,080 from the initial closing and \$141,120 from the second and final closing) and were reimbursed for their out-of-pocket-expenses. In addition, the placement agents received an aggregate of 106,217 shares of our common stock (84,167 shares from the initial closing and 22,050 shares from the second and final closing) and warrants to purchase 361,875 shares of our common stock (251,625 shares from the initial closing and 110,250 shares from the second and final closing) at an exercise price of \$1.60 per share.

Except as set forth above, no commission was paid to the placement agents for sales of shares of our common stock or warrants upon the conversion of the debt held by note holders from Bacterin's bridge financings. Additionally, we paid auditing fees of approximately \$86,000, and legal fees for us, Bacterin and the investors in the Reverse Merger and private placement of approximately \$340,000.

The net proceeds will be used to pay certain of our debts and provide additional working capital for us. Specifically, the net proceeds of the private placement will be used by us to support sales and marketing, purchase bio-materials and other product components, fund research and development, reduce existing trade payables and other liabilities, repay notes payable, pay the costs associated with the Reverse Merger and the private placement (including the future costs of registering the Company's common shares under the Securities Act and on-going public company costs) and for working capital and general corporate purposes.

The amount of our actual expenditures will depend upon numerous factors, including the pace with which we can commercially deploy our products. Actual expenditures may vary substantially and we may find it necessary or advisable to reallocate the net proceeds for other purposes. Pending application of the net proceeds as described above, we intend to invest the net proceeds from the private placement in short-term, interest-bearing securities.

Item 16. Exhibits.

(a) Exhibits

Exhibit No.	Description
2.1	Agreement and Plan of Merger, dated as of June 30, 2010, by and among K-Kitz, Inc., KB Merger Sub, Inc. and Bacterin International, Inc. ⁽¹⁾
3.1	Certificate of Incorporation, including all amendments to date ⁽¹⁾
3.2	Amended and Restated Bylaws, dated September 24, 2010 ⁽²⁾
4.1	Form of Warrant to Purchase Common Stock ⁽¹⁾
5.1*	Opinion of Exemplar Law LLC
10.1	Form of Private Placement Subscription Agreement to purchase Shares and Warrants ⁽¹⁾
10.2	Form of Registration Rights Agreement ⁽³⁾
10.3	Form of Management Lock-Up Agreement for the officers and directors of Bacterin International Holdings, Inc. and Bacterin International, Inc. ⁽³⁾
10.4	Form of Indemnification Agreement for the officers and directors of Bacterin International Holdings, Inc. and Bacterin International, Inc. ⁽³⁾
10.5	Bacterin International Equity Incentive Plan ⁽³⁾
10.6	Guy Cook Employment Agreement ⁽³⁾ •
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10.10	Darrel Holmes Employment Agreement ⁽³⁾ •
10.11*	Loan and Security Agreement dated as of November 17, 2010 between Bacterin International Holdings, Inc. and Bacterin International, Inc. and Venture Lending & Leasing V, Inc. and Venture Lending & Leasing VI Inc.
10.12*	Supplement to the Loan and Security Agreement dated as of November 17, 2010 among Bacterin International Holdings, Inc. and Bacterin International, Inc. and Venture Lending & Leasing V, Inc. and Venture Lending & Leasing VI, Inc.
10.13*	Agreement for Bone Allograft, DBM, and Bone Graft Substitute Products between Broadlane, Inc. and Bacterin International, Inc.
16.1	Letter from W.T. Uniack & Co., CPA's P.C., dated September 24, 2010 ⁽²⁾
21.1	Subsidiaries of the Registrant ⁽³⁾
23.1*	Consent of Child, Van Wagoner & Bradshaw, PLLC
23.2*	Consent of Exemplar Law LLC (included in Exhibit 5.1)
24.1*	Power of Attorney (included on the Signature Page of the Registration Statement)

• Compensation Agreement

* Filed herewith

(1) Incorporated herein by reference to the Registrant's Form 8-K dated June 30, 2010, filed with the SEC on June 30, 2010.

(2) Incorporated herein by reference to the Registrant's Form 8-K dated September 24, 2010, filed with the SEC on September 24, 2010.

(3) Incorporated herein by reference to the Registrant's Form 8-K dated June 30, 2010, filed with the SEC on July 7, 2010.

(b) Financial Statement Schedules

No financial statement schedules are required to be filed with this registration statement.

Item 17. Undertakings.

(A) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

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

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

(i) If the registrant is relying on Rule 430B:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

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

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however,* that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

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

(C) The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b) (1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Belgrade, State of Montana, on December 7, 2010.

BACTERIN INTERNATIONAL HOLDINGS, INC.

By: /s/ Guy Cook

Name: Guy Cook

Title: Chairman of the Board, Chief Executive Officer, President and Chief Scientific Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that the persons whose signature appears below constitute and appoint jointly and severally, Guy Cook and John P. Gandolfo and each one of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place, and stead, in any and all capacities, to sign any and all amendments (including pre-effective and post-effective amendments) to this registration statement and to sign any registration statement and amendments thereto for the same offering filed pursuant to Rule 462(b) under the Securities Act of 1933, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all which said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do, or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Capacity</u>	<u>Date</u>
<u>/s/ Guy Cook</u> Guy Cook	Chairman of the Board, Chief Executive Officer, President and Chief Scientific Officer (Principal Executive Officer)	December 7, 2010
<u>/s/ John P. Gandolfo</u> John P. Gandolfo	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	December 7, 2010
<u>/s/ Mitchell T. Godfrey</u> Mitchell T. Godfrey	Director	December 7, 2010
<u>/s/ Kent Swanson</u> Kent Swanson	Director	December 7, 2010
<u>/s/ Michael Lopach</u> Michael Lopach	Director	December 7, 2010
<u>/s/ Jon Wickwire</u> Jon Wickwire	Director	December 7, 2010

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(1) Incorporated herein by reference to the Registrant's Form 8-K dated June 30, 2010, filed with the SEC on June 30, 2010.

(2) Incorporated herein by reference to the Registrant's Form 8-K dated September 24, 2010, filed with the SEC on September 24, 2010.

(3) Incorporated herein by reference to the Registrant's Form 8-K dated June 30, 2010, filed with the SEC on July 7, 2010.



December 6, 2010

Bacterin International Holdings, Inc.
600 Cruiser Lane
Belgrade, Montana 59714

Ladies and Gentlemen:

We have acted as counsel to Bacterin International Holdings, Inc., a Delaware corporation (the "Company"), in connection with the preparation and filing with the Securities and Exchange Commission of Amendment No. 1 to the Company's Registration Statement on Form S-1, File No. 333-169620 (the "Registration Statement"), under the Securities Act of 1933, as amended (the "Act"), relating to the registration of the sale by the selling stockholders listed in the Registration Statement of the number of shares of common stock, par value \$0.000001 per share, of the Company specified in the Registration Statement, which includes shares that are already issued and outstanding (the "Shares") and shares issuable upon the exercise of warrants (the "Warrant Shares").

In connection with this opinion, we have reviewed such documents and made such examination of law as we have deemed appropriate to give the opinion expressed below. In connection with this opinion, we have assumed the legal capacity of all natural persons, the accuracy and completeness of all documents and records that we have reviewed, the genuineness of all signatures, the authenticity of the documents submitted to us as originals and the conformity to authentic original documents of all documents submitted to us as copies.

The opinion expressed below is limited to the Delaware General Corporation Law (which includes judicial decisions interpreting the Delaware General Corporation Law).

Based on the foregoing, and subject to the qualifications stated herein, we are of the opinion that the Shares are, and the Warrant Shares will be when issued, validly issued, fully paid and non-assessable.

This opinion is given as of the date hereof, and we assume no obligation to advise you after the date hereof of facts or circumstances that come to our attention or changes in law that occur which could affect the opinion contained herein. This opinion is being rendered for the benefit of the Company in connection with the matters addressed herein.

We hereby consent to the filing of this letter as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the prospectus that is a part of the Registration Statement. In giving this consent, however, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Act or the rules and regulations thereunder.

Very truly yours,

/s/ Exemplar Law LLC

LOAN AND SECURITY AGREEMENT

Dated as of November 17, 2010

between

**BACTERIN INTERNATIONAL HOLDINGS, INC.,
a Delaware corporation,**

and

**BACTERIN INTERNATIONAL, INC.
a Nevada corporation,**

each sometimes individually as a "Borrower" and sometimes collectively as the "Borrowers"

and

**VENTURE LENDING & LEASING V, INC.,
a Maryland corporation,**

and

**VENTURE LENDING & LEASING VI, INC.,
a Maryland corporation,**

each, as "Lender"

LOAN AND SECURITY AGREEMENT

The Borrowers and each of Venture Lending & Leasing V, Inc. ("VLL5") and Venture Lending & Leasing VI, Inc. ("VLL6") have entered or anticipate entering into one or more transactions pursuant to which each Lender severally and not jointly agrees to make available to Borrowers a loan facility governed by the terms and conditions set forth in this document and one or more Supplements executed by Borrowers and Lender which incorporate this document by reference. Each Supplement constitutes a supplement to and forms part of this document, and will be read and construed as one with this document, so that this document and the Supplement constitute a single agreement between the parties (collectively referred to as this "Agreement").

Accordingly, the parties agree as follows:

ARTICLE 1 - INTERPRETATION

- 1.1 Definitions.** The terms defined in Article 1 and in the Supplement will have the meanings therein specified for purposes of this Agreement.
- 1.2 Inconsistency.** In the event of any inconsistency between the provisions of any Supplement and this document, the provisions of the Supplement will be controlling for the purpose of all relevant transactions.
- 1.3 Several Obligations of Lender.** The parties are entering into this single Agreement for convenience, and this Agreement is and shall be interpreted for all purposes as separate and distinct agreements between Borrowers and VLL5, on the one hand, and Borrowers and VLL6, on the other hand, and nothing in this Agreement shall be deemed a joint venture, partnership or other association between VLL5 and VLL6. Each reference in this Agreement to "Lender" shall mean and refer to each of VLL5 and VLL6, singly and independent of one another. Without limiting the generality of the foregoing, the Commitment, covenants and other obligations of "Lender" under this Agreement are several and not joint obligations of VLL5 and VLL6, and all rights and remedies of "Lender" under this Agreement may be exercised by VLL5 and/or VLL6 independently of one another.

ARTICLE 2 - THE COMMITMENT AND LOANS

- 2.1 The Commitment.** Subject to the terms and conditions of this Agreement, Lender agrees to make term loans to Borrowers from time to time from the Closing Date and to, but not including, the Termination Date in an aggregate principal amount not exceeding the Commitment. The Commitment is not a revolving credit commitment, and Borrowers do not have the right to repay and reborrow hereunder. Each Loan requested by Borrowers to be made on a single Business Day shall be for a minimum principal amount set forth in the Supplement, except to the extent the remaining Commitment is a lesser amount.
- 2.2 Notes Evidencing Loans; Repayment.** Each Loan shall be evidenced by a separate Note payable to the order of Lender, in the total principal amount of the Loan. Principal and interest of each Loan shall be payable at the times and in the manner set forth in the Note and regularly scheduled payments thereof and each Final Payment shall be effected by automatic debit of the appropriate funds from the Primary Operating Account as specified in the Supplement hereto.
- 2.3 Procedures for Borrowing.**
- (a)** At least five (5) Business Days' prior to a proposed Borrowing Date, Lender shall have received from the Borrowers a written request for a borrowing hereunder (a "Borrowing Request"). Each Borrowing Request shall be in substantially the form of Exhibit "B" to the Supplement, shall be executed by a responsible executive or financial officer of each of the Borrowers, and shall state how much is requested, and shall be accompanied by such other information and documentation as Lender may reasonably request, including the original executed Note(s) for the Loan(s) covered by the Borrowing Request.
- (b)** No later than 1:00 p.m. Pacific Standard Time on the Borrowing Date, if Borrowers have satisfied the conditions precedent in Article 4, Lender shall make the Loan available to Borrowers in immediately available funds.
- 2.4 Interest.** Except as otherwise specified in the applicable Note and/or Supplement, Basic Interest on the outstanding principal balance of each Loan shall accrue daily at the Designated Rate from the Borrowing Date. If the outstanding principal balance of such Loan is not paid at maturity, interest shall accrue at the Default Rate until paid in full, as further set forth herein.
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2.5 Final Payment. Borrowers shall pay the Final Payment, if any, with respect to each Loan on the date set forth in the Note evidencing such Loan.

2.6 Interest Rate Calculation. Basic Interest, along with charges and fees under this Agreement and any Loan Document, shall be calculated for actual days elapsed on the basis of a 360-day year, which results in higher interest, charge or fee payments than if a 365-day year were used. In no event shall Borrowers be obligated to pay Lender interest, charges or fees at a rate in excess of the highest rate permitted by applicable law from time to time in effect.

2.7 Default Interest. Any unpaid payments in respect of the Obligations shall bear interest from their respective maturities, whether scheduled or accelerated, at the Default Rate. Borrowers shall pay such interest on demand.

2.8 Late Charges. If Borrowers are late in making any payment in respect of the Obligations by more than five (5) days, then Borrowers agree to pay a late charge of five percent (5%) of the payment due, but not less than fifty dollars (\$50.00) for any one such delinquent payment. This late charge may be charged by Lender for the purpose of defraying the expenses incidental to the handling of such delinquent amounts. Each Borrower acknowledges that such late charge represents a reasonable sum considering all of the circumstances existing on the date of this Agreement and represents a fair and reasonable estimate of the costs that will be sustained by Lender due to the failure of Borrowers to make timely payments. Each Borrower further agrees that proof of actual damages would be costly and inconvenient. Such late charge shall be paid without prejudice to the right of Lender to collect any other amounts provided to be paid or to declare a default under this Agreement or any of the other Loan Documents or from exercising any other rights and remedies of Lender.

2.9 Lender's Records. Principal, Basic Interest, Final Payments and all other sums owed under any Loan Document shall be evidenced by entries in records maintained by Lender for such purpose. Each payment on and any other credits with respect to principal, Basic Interest, Final Payments and all other sums outstanding under any Loan Document shall be evidenced by entries in such records. Absent manifest error, Lender's records shall be conclusive evidence thereof.

2.10 Grant of Security Interests; Filing of Financing Statements.

(a) To secure the timely payment and performance of all of the Obligations, each Borrower hereby grants to Lender a continuing security interest in all of the Collateral of such Borrower. In connection with the foregoing, each Borrower authorizes Lender to prepare and file any financing statements describing the Collateral without otherwise obtaining such Borrower's signature or consent with respect to the filing of such financing statements.

(b) In furtherance of the grant of the security interests in the Collateral pursuant to Section 2.10(a) above, Parent hereby pledges and grants to the Lender a security interest in all the Shares, together with all proceeds and substitutions thereof, all cash, stock and other moneys and property paid thereon, all rights to subscribe for securities declared or granted in connection therewith, and all other cash and noncash proceeds of the foregoing, as security for the performance of the Obligations. On the Closing Date or at any time thereafter following Lender's request, the certificate or certificates for the Shares will be delivered to Lender, accompanied by an instrument of assignment duly executed in blank by Parent, unless such Shares have not been certificated. To the extent required by the terms and conditions governing the Shares, Parent shall cause the books of each entity whose Shares are part of the Collateral and any transfer agent to reflect the pledge of the Shares. Upon the occurrence and during the continuance of an Event of Default hereunder, Lender may effect the transfer of any securities included in the Collateral (including but not limited to the Shares) into the name of Lender and cause new certificates representing such securities to be issued in the name of Lender or its transferee(s). Parent will execute and deliver such documents, and take or cause to be taken such actions, as Lender may reasonably request to perfect or continue the perfection of Lender's security interest in the Shares. Unless an Event of Default shall have occurred and be continuing, Parent shall be entitled to exercise any voting rights with respect to the Shares and to give consents, waivers and ratifications in respect thereof, provided that no vote shall be cast or consent, waiver or ratification given or action taken which would be inconsistent with any of the terms of this Agreement or which would constitute or create any violation of any of such terms. All such rights to vote and give consents, waivers and ratifications shall terminate upon the occurrence and continuance of an Event of Default.

(c) Each Borrower is and shall remain absolutely and unconditionally liable, on a joint and several basis, for the performance of all Obligations, including, without limitation, any deficiency by reason of the failure of the Collateral to satisfy all amounts due Lender under any of the Loan Documents.

(d) All Collateral pledged by each Borrower under this Agreement and any Supplement shall secure the timely payment and performance of all Obligations under this Agreement, the Notes and the other Loan Documents. Except as expressly provided in this Agreement, no Collateral pledged under this Agreement or any Supplement shall be released until such time as all Obligations under this Agreement and the other Loan Documents have been satisfied and paid in full.

ARTICLE 3 - REPRESENTATIONS AND WARRANTIES

Each Borrower, jointly and severally, represents and warrants that, except as set forth in the Supplement or the Schedule of Exceptions hereto, if any, as of the Closing Date and each Borrowing Date:

3.1 Due Organization. Each Borrower is a corporation duly organized and validly existing in good standing under the laws of the jurisdiction of its incorporation, and is duly qualified to conduct business and is in good standing in each other jurisdiction in which its business is conducted or its properties are located, except where the failure to be so qualified would not reasonably be expected to have a Material Adverse Effect.

3.2 Authorization, Validity and Enforceability. The execution, delivery and performance of all Loan Documents executed by each Borrower are within each such Borrower's powers, have been duly authorized, and are not in conflict with any Borrower's certificate of incorporation or by-laws, or the terms of any charter or other organizational document of any Borrower, as amended from time to time; and all such Loan Documents constitute valid and binding obligations of each Borrower, enforceable in accordance with their terms (except as may be limited by bankruptcy, insolvency and similar laws affecting the enforcement of creditors' rights in general, and subject to general principles of equity).

3.3 Compliance with Applicable Laws. Each Borrower has complied with all licensing, permit and fictitious name requirements necessary to lawfully conduct the business in which it is engaged, and to any sales, leases or the furnishing of services by Borrowers, including without limitation those requiring consumer or other disclosures, the noncompliance with which would have a Material Adverse Effect.

3.4 No Conflict. The execution, delivery, and performance by each Borrower of all Loan Documents to which it is a party are not in conflict with any law, rule, regulation, order or directive applicable to each Borrower, or any material indenture, agreement, or undertaking to which each Borrower is a party or by which each Borrower may be bound. Without limiting the generality of the foregoing, the issuance of the Warrant to Lender (or its designee) and the grant of registration rights in connection therewith do not violate any agreement or instrument by which Parent is bound or require the consent of any holders of Parent's securities other than consents which have been obtained prior to the Closing Date.

3.5 No Litigation, Claims or Proceedings. There is no litigation, tax claim, proceeding or dispute pending, or, to the knowledge of any Borrower, threatened in writing against any Borrower, its property or the conduct of its business which could reasonably be expected to result in a Material Adverse Effect.

3.6 Correctness of Financial Statements. The Consolidated financial statements of Parent which have been delivered to Lender fairly and accurately reflect the financial condition of Parent and its Subsidiaries in accordance with GAAP (except with respect to unaudited financial statements, for the absence of footnotes and subject to normal year-end adjustments) as of the latest date of such financial statements; and, since that date there has been no Material Adverse Change.

3.7 No Subsidiaries. Bacterin International, Inc. is wholly owned by Parent. As of the date hereof, Bacterin International, Inc. is not a majority owner or in a control relationship with any other business entity. As of the date hereof, Parent is not a majority owner of or in a control relationship with any business entity other than Bacterin International, Inc.

3.8 Environmental Matters. To its knowledge each Borrower is in compliance with Environmental Laws, except to the extent a failure to be in such compliance could not reasonably be expected to have a Material Adverse Effect.

3.9 No Event of Default. No Default or Event of Default has occurred and is continuing.

3.10 Full Disclosure. None of the representations or warranties made by any Borrower in the Loan Documents as of the date such representations and warranties are made or deemed made, and none of the statements contained in any exhibit, report, statement or certificate furnished by or on behalf of any Borrower in connection with the Loan Documents (including disclosure materials delivered by or on behalf of any Borrower to Lender prior to the Closing Date or pursuant to Section 5.2 hereof), contains any untrue statement of a material fact or omits any material fact required to be stated therein or necessary to make the statements made therein, in light of the circumstances under which they are made, not misleading as of the time when made or delivered (it being recognized by Lender that projections and estimates as to future events are not to be viewed as facts and that the actual results during the period or periods covered by any such projections and estimates may differ from projected or estimated results).

3.11 Specific Representations Regarding Collateral.

(a) Title. Except for the security interests created by this Agreement and Permitted Liens, (i) each Borrower is and will be the unconditional legal and beneficial owner of the Collateral, and (ii) the Collateral is genuine and subject to no Liens, rights or defenses of others. There exist no prior assignments or encumbrances of record with the U.S. Patent and Trademark Office or U.S. Copyright Office affecting any Collateral in favor of any third party, other than Lender.

(b) Rights to Payment. The names of the obligors, amount owing to each Borrower, due dates and all other information with respect to the Rights to Payment are and will be correctly stated in all material respects in all Records relating to the Rights to Payment. Each Borrower further represents and warrants, to its knowledge, that each Person appearing to be obligated on a Right to Payment has authority and capacity to contract and is bound as it appears to be.

(c) Location of Collateral. Each Borrower's chief executive office, Inventory, Records, Equipment (other than certain Equipment not to exceed \$25,000 in aggregate value), and any other offices or places of business are located at the address(es) shown on the Supplement or such other locations that Borrowers have notified Lender of pursuant to Section 5.1(d).

(d) Business Names. Other than its full corporate name, no Borrower has conducted business using any trade names or fictitious business names except as shown on the Supplement.

3.12 Copyrights, Patents, Trademarks and Licenses.

(a) Each Borrower owns or is licensed or otherwise has the right to use all of the patents, trademarks, service marks, trade names, copyrights, contractual franchises, authorizations and other similar rights that are reasonably necessary for the operation of its business, without, to its knowledge, conflict with the rights of any other Person.

(b) To each Borrower's knowledge, no slogan or other advertising device, product, process, method, substance, part or other material now employed, or now contemplated to be employed, by any Borrower infringes upon any rights held by any other Person.

(c) No claim or litigation regarding any of the foregoing is pending or, to each Borrower's knowledge, threatened in writing, which could reasonably be expected to have a Material Adverse Effect.

3.13 Regulatory Compliance. Each Borrower has met the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA. No event has occurred resulting from any Borrower's failure to comply with ERISA that is reasonably likely to result in any Borrower's incurring any liability that could reasonably be expected to have a Material Adverse Effect. No Borrower is an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940. No Borrower is engaged principally, or as one of its important activities, in the business of extending credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulations T and U of the Board of Governors of the Federal Reserve System). Each Borrower has complied with all the provisions of the Federal Fair Labor Standards Act.

3.14 Shares. Parent has full power and authority to create a first priority Lien on the Shares and no disability or contractual obligation exists that would prohibit Parent from pledging the Shares pursuant to this Agreement. To Parent's knowledge, there are no subscriptions, warrants, rights of first refusal or other restrictions on transfer relative to, or options exercisable with respect to the Shares. The Shares have been and will be duly authorized and validly issued, and are fully paid and non-assessable. To Parent's knowledge, the Shares are not the subject of any present or threatened suit, action, arbitration, administrative or other proceeding, and Parent knows of no reasonable grounds for the institution of any such proceedings.

3.15 Survival. The representations and warranties of Borrowers as set forth in this Agreement survive the execution and delivery of this Agreement.

ARTICLE 4 - CONDITIONS PRECEDENT

4.1 Conditions to First Loan. The obligation of Lender to make its first Loan hereunder is, in addition to the conditions precedent specified in Section 4.2 and in any Supplement, subject to the fulfillment of the following conditions and to the receipt by Lender of the documents described below, duly executed and in form and substance satisfactory to Lender and its counsel:

(a) Resolutions. A certified copy of the resolutions of the Board of Directors of each Borrower, as applicable, authorizing the execution, delivery and performance by each such Borrower of the Loan Documents.

(b) Incumbency and Signatures. A certificate of the secretary of each Borrower, in each case certifying the names of the officer or officers of each such Borrower authorized to sign the Loan Documents, together with a sample of the true signature of each such officer.

(c) Legal Opinion. The opinion of legal counsel for Borrowers as to such matters as Lender may reasonably request, in a form reasonably acceptable to Lender.

(d) Articles/Certificate and Bylaws. Certified copies of the Articles or Certificate of Incorporation and Bylaws of each Borrower, as amended through the Closing Date.

(e) This Agreement. Original counterparts of this Agreement and the initial Supplement, together with the Disclosure Letter, disclosing such information as is acceptable to Lender.

(f) Financing Statements. Filing copies (or other evidence of filing satisfactory to Lender and its counsel) of such UCC financing statements, collateral assignments, account control agreements, and termination statements, with respect to the Collateral as Lender shall request.

(g) Intellectual Property Security Agreement. An Intellectual Property Security Agreement executed by each Borrower substantially in the form attached as Exhibit "G" to the Supplement.

(h) Lien Searches. UCC lien, judgment, bankruptcy and tax lien searches of each Borrower from such jurisdictions or offices as Lender may reasonably request, all as of a date reasonably satisfactory to Lender and its counsel.

(i) Good Standing Certificate. A certificate of status or good standing of each Borrower as of a date acceptable to Lender from the jurisdiction of such Borrower's organization and any foreign jurisdictions where a Borrower is qualified to do business.

(j) Warrant(s). An original warrant issued by Parent to Lender (or its designee) exercisable for such number, type and class of shares of Parent's capital stock, and for an initial exercise price as is specified in the Supplement.

(k) Insurance Certificates. Insurance certificates showing Lender as loss payee or additional insured.

(l) Shares. A stock power executed by Parents, together with the stock certificate, if any, representing the Shares.

(m) Other Documents. Such other documents and instruments as Lender may reasonably request to effectuate the intents and purposes of this Agreement.

4.2 Conditions to All Loans. The obligation of Lender to make its initial Loan and each subsequent Loan is subject to the following further conditions precedent that:

(a) No Default. No Default or Event of Default has occurred and is continuing or will result from the making of any such Loan, and the representations and warranties of Borrowers contained in Article 3 of this Agreement and Part 3 of the Supplement are true and correct as of the Borrowing Date of such Loan, except to the extent that such representations and warranties relate solely to an earlier date.

(b) No Material Adverse Change. No event has occurred that has had or could reasonably be expected to have a Material Adverse Change.

- (c) **Borrowing Request.** Borrowers shall have delivered to Lender a Borrowing Request for such Loan.
- (d) **Note.** Borrowers shall have delivered an original executed Note evidencing such Loan, substantially in the form attached to the Supplement as an exhibit.
- (e) **Supplemental Lien Filings.** Each Borrower shall have executed and delivered such amendments or supplements to this Agreement and additional Security Documents, financing statements and third party waivers as Lender may reasonably request in connection with the proposed Loan, in order to create, protect or perfect or to maintain the perfection of Lender's Liens on the Collateral.
- (f) **Financial Projections.** Parent shall have delivered to Lender Parent's business plan and/or financial projections or forecasts as most recently approved by Parent's Board of Directors.

ARTICLE 5 - AFFIRMATIVE COVENANTS

During the term of this Agreement and until its performance of all Obligations (other than inchoate indemnity obligations), each Borrower will:

5.1 Notice to Lender. Promptly give written notice to Lender of:

- (a) Any litigation or administrative or regulatory proceeding affecting any Borrower where the amount claimed against any Borrower is at the Threshold Amount or more, or where the granting of the relief requested could reasonably be expected have a Material Adverse Effect; or of the acquisition by a Borrower of any commercial tort claim, including brief details of such claim and such other information as Lender may reasonably request to enable Lender to better perfect its Lien in such commercial tort claim as Collateral.
- (b) Any substantial dispute which may exist between any Borrower and any governmental or regulatory authority.
- (c) The occurrence of any Default or any Event of Default.
- (d) Any change in the location of any of Borrower's places of business or Collateral (other than Equipment in aggregate value not to exceed \$25,000) in advance of such change, or of the establishment of any new, or the discontinuance of any existing, place of business.
- (e) Any dispute or default by any Borrower or any other party under any joint venture, partnering, distribution, cross-licensing, strategic alliance, collaborative research or manufacturing, license or similar agreement which could reasonably be expected to have a Material Adverse Effect.
- (f) Any other matter which has resulted or could reasonably be expected to result in a Material Adverse Change.

5.2 Financial Statements. Deliver to Lender or cause to be delivered to Lender, in form and detail satisfactory to Lender the following financial and other information, which each Borrower warrants shall be accurate and complete in all material respects:

- (a) **Monthly Financial Statements.** As soon as available but no later than the earlier of (i) forty five (45) days after the end of each month and (ii) the date Bank requires delivery, Parent's balance sheet as of the end of such period, and Parent's income statement for such period and for that portion of Parent's financial reporting year ending with such period, prepared on a Consolidated basis in accordance with GAAP (except with respect to unaudited financial statements, for the absence of footnotes and subject to normal year-end adjustments) and attested by a responsible financial officer of Parent as fairly presenting in all material respects Parent's financial condition and the results of operations.
 - (b) **Year-End Financial Statements.** Within 90 days after the end of each financial reporting year, a complete copy of Parent's financial statements, which shall include balance sheet, income statement, statement of changes in equity and statement of cash flows for such year, prepared on a Consolidated basis in accordance with GAAP and certified by an independent certified public accountant selected by Borrowers and satisfactory to Lender (the "Accountant"). The Accountant's certification shall not be qualified or limited due to a restricted or limited examination by the Accountant of any material portion of any Borrower's records or otherwise.
 - (c) **Compliance Certificates.** Simultaneously with the delivery of each set of financial statements referred to in paragraphs (a) and (b) above, a certificate of the chief financial officer of each Borrower (or other executive officer) substantially in the form of Exhibit "C" to the Supplement stating whether any Default or Event of Default exists on the date of such certificate, and if so, setting forth the details thereof and the action which each such Borrower is taking or proposes to take with respect thereto.
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(d) Government Required Reports; Press Releases. Promptly after sending, issuing, making available, or filing, copies of all statements released to any news media for publication, all reports, proxy statements, and financial statements that any Borrower sends or makes available to its stockholders, and, not later than five (5) days after actual filing or the date such filing was first due, all registration statements and reports that any Borrower files or is required to file with the Securities and Exchange Commission, or any other governmental or regulatory authority.

(e) Other Information. Such other statements, lists of property and accounts, budgets (as updated), sales projections, forecasts, reports, 409A valuation reports, operating plans, financial exhibits, capitalization tables (as updated) and information relating to equity financings consummated after the Closing Date (including post-closing capitalization table(s)), or other information as Lender may from time to time reasonably request.

5.3 Reserved.

5.4 Existence. Maintain and preserve each Borrower's existence, present form of business, and all rights and privileges necessary or desirable in the normal course of its business except that Bacterin International, Inc. may merge with and into Parent so long as Parent is the surviving entity; and keep all of each Borrower's property in good working order and condition, ordinary wear and tear excepted.

5.5 Insurance. Obtain and keep in force insurance in such amounts and types as is usual in the type of business conducted by each Borrower, with insurance carriers having a policyholder rating of not less than "A" and financial category rating of Class VII in "Best's Insurance Guide," unless otherwise approved by Lender. Such insurance policies must be in form and substance satisfactory to Lender, and shall list Lender as an additional insured or loss payee, as applicable, on endorsement(s) in form reasonably acceptable to Lender. Each Borrower shall furnish to Lender such endorsements, and upon Lender's request, copies of any or all such policies. So long as no Event of Default exists, Lender agrees to remit any proceeds of insurance received by Lender to the applicable Borrower and such Borrower shall have the right to use such proceeds for the purchase of property useful in the business of Borrower, provided that any such property which is purchased to replace Collateral shall be deemed Collateral in which Lender has been granted a first priority Lien, subject to Permitted Liens. If an Event of Default has occurred and is continuing, then at Lender's option proceeds payable under any casualty policy will be payable to Lender toward the satisfaction of the Obligations in accordance with the terms of this Agreement.

5.6 Accounting Records. Maintain adequate books, accounts and records, and prepare all financial statements in accordance with GAAP (except with respect to unaudited financial statements, for the absence of footnotes and subject to normal year-end adjustments), and in compliance with the regulations of any governmental or regulatory authority having jurisdiction over any Borrower or any such Borrower's business; and permit employees or agents of Lender at such reasonable times as Lender may request, upon reasonable prior notice but no more than twice a year unless an Event of Default has occurred and is continuing, at Borrowers' expense, to inspect each Borrower's properties, and to examine, and make copies and memoranda of each Borrower's books, accounts and records.

5.7 Compliance With Laws. Comply with all laws (including Environmental Laws), rules, regulations applicable to, and all orders and directives of any governmental or regulatory authority having jurisdiction over, any Borrower or any such Borrower's business, and with all material agreements to which a Borrower is a party, except where the failure to so comply could not reasonably be expected to have a Material Adverse Effect.

5.8 Taxes and Other Liabilities. Pay all of each Borrower's Indebtedness when due; pay all material taxes and other governmental or regulatory assessments before delinquency or before any penalty attaches thereto, except as may be contested in good faith by the appropriate procedures and for which such Borrower shall maintain appropriate reserves; and timely file all material required tax returns.

5.9 Special Collateral Covenants.

(a) **Maintenance of Collateral; Inspection.** Do all things reasonably necessary to maintain, preserve, protect and keep all Collateral in good working order and salable condition, ordinary wear and tear excepted, deal with the Collateral in all ways as are considered good practice by owners of like property, and use the Collateral lawfully and, to the extent applicable, only as permitted by each Borrower's insurance policies. Maintain, or cause to be maintained, complete and accurate Records relating to the Collateral. Upon reasonable prior notice at reasonable times during normal business hours, each Borrower hereby authorizes Lender's officers, employees, representatives and agents to inspect the Collateral and to discuss the Collateral and the Records relating thereto with each such Borrower's officers and employees, and, in the case of any Right to Payment, with any Person which is or may be obligated thereon.

(b) **Documents of Title.** Not sign or authorize the signing of any financing statement or other document naming any Borrower as debtor or obligor, or acquiesce or cooperate in the issuance of any bill of lading, warehouse receipt or other document or instrument of title with respect to any Collateral, except those negotiated to Lender, or those naming Lender as secured party, or if solely to create, perfect or maintain a Permitted Lien.

(c) **Change in Location or Name.** Without at least 30 days' prior written notice to Lender: (a) not relocate any Collateral (except for Equipment with an aggregate value not to exceed \$25,000) or Records, its chief executive office, or establish a place of business at a location other than as specified in the Supplement; and (b) not change its name, mailing address, location of Collateral, jurisdiction of incorporation or its legal structure.

(d) **Decals, Markings.** At the request of Lender, firmly affix a decal, stencil or other marking to designated items of Equipment, indicating thereon the security interest of Lender.

(e) **Agreement With Persons in Possession of Collateral.** Obtain and maintain such acknowledgments, consents, waivers and agreements (each a "**Waiver**") from the owner, operator, lienholder, mortgagee, landlord or any Person in possession of tangible Collateral in excess of \$25,000 per location as Lender may require, all in form and substance satisfactory to Lender.

(f) **Certain Agreements on Rights to Payment.** Other than in the ordinary course of business, not make any material discount, credit, rebate or other reduction in the original amount owing on a Right to Payment or accept in satisfaction of a Right to Payment less than the original amount thereof.

5.10 **Authorization for Automated Clearinghouse Funds Transfer.** (i) Authorize Lender to initiate debit entries to the Primary Operating Account, specified in the Supplement hereto, through Automated Clearinghouse ("**ACH**") transfers, in order to satisfy the regularly scheduled payments of principal, interest and Final Payments (if any); (ii) provide Lender at least thirty (30) days notice of any change in the Primary Operating Account; and (iii) grant Lender any additional authorizations necessary to begin ACH debits from a new account which becomes the Primary Operating Account.

5.11 **Relationship between Borrowers.** Bacterin International, Inc. shall at all times remain a wholly-owned subsidiary of Parent.

ARTICLE 6 - NEGATIVE COVENANTS

During the term of this Agreement and until the performance of all Obligations (other than inchoate indemnity obligations), each Borrower will not:

6.1 **Indebtedness.** Be indebted for borrowed money, the deferred purchase price of property, or leases which would be capitalized in accordance with GAAP; or become liable as a surety, guarantor, accommodation party or otherwise for or upon the obligation of any other Person, except:

(a) Indebtedness incurred for the acquisition of supplies or inventory on normal trade credit;

(b) Indebtedness incurred pursuant to one or more transactions permitted under Section 6.4;

(c) Indebtedness of each Borrower under this Agreement;

(d) Subordinated Debt;

(e) subject to the terms of Part 2, Section 3 of the Supplement, Indebtedness of Borrowers to Bank under the A/R Facility;

(f) Indebtedness of Borrowers secured by a Lien described in (i) clause (c) of the definition of Permitted Liens, not to exceed **[\$50,000]** in aggregate amount outstanding at any time or (ii) clause (o) of the definition of Permitted Liens;

(g) Other Indebtedness of Borrowers not otherwise permitted by this Section 6.1 in an aggregate amount not to exceed \$100,000;

- (h) Indebtedness arising from the endorsement of instruments in the ordinary course of business;
- (i) Indebtedness of Borrowers pursuant to corporate credit cards in the ordinary course of business in an aggregate amount not to exceed \$50,000;
- (j) any Indebtedness approved by Lender prior to the Closing Date as shown on Schedule 6.1 to the Disclosure Letter; and
- (k) extensions, refinancings, modifications, amendments and restatements of any item of permitted Indebtedness (a) through (j) above, so long as the principal amount of such Indebtedness is not increased or the maturity date decreased.

6.2 Liens. Create, incur, assume or permit to exist any Lien, or grant any other Person a negative pledge (except negative pledges granted to holders of Permitted Liens or existing in an agreement providing for the acquisition of any Borrower), on any Borrower's property, except Permitted Liens. Borrowers and Lender agree that this covenant is not intended to constitute a lien, deed of trust, equitable mortgage, or security interest of any kind on any of each Borrower's real property, and this Agreement shall not be recorded or recordable. Notwithstanding the foregoing, however, violation of this covenant by Borrowers shall constitute an Event of Default.

6.3 Dividends. Pay any dividends or purchase, redeem or otherwise acquire or make any other distribution with respect to any either Borrower's capital stock, except (a) dividends or other distributions solely of capital stock of such Borrower, (b) dividends or other distributions by Bacterin International, Inc. to Parent, and (c) so long as no Event of Default has occurred and is continuing, repurchases of stock from employees, directors or consultants upon termination of employment or service under reverse vesting or similar repurchase plans by (i) cash not to exceed \$100,000 in any calendar year or (ii) cancellation of indebtedness.

6.4 Changes/Mergers. Liquidate or dissolve; or enter into any consolidation, merger or other combination in which the stockholders of any Borrower immediately prior to the first such transaction own less than 50% of the voting stock of such Borrower immediately after giving effect to such transaction or related series of such transactions, except that any Borrower may consolidate or merge so long as: (A) the entity that results from such merger or consolidation (the "Surviving Entity") shall have executed and delivered to Lender an agreement in form and substance reasonably satisfactory to Lender, containing an assumption by the Surviving Entity of the due and punctual payment and performance of all Obligations and performance and observance of each covenant and condition of such Borrower in the Loan Documents; (B) all such obligations of the Surviving Entity to Lender shall be guaranteed by any entity that directly or indirectly owns or controls more than 50% of the voting stock of the Surviving Entity; (C) immediately after giving effect to such merger or consolidation, no Event of Default or, event which with the lapse of time or giving of notice or both, would result in an Event of Default shall have occurred and be continuing; and (D) the credit risk to Lender, in its sole discretion, of the Surviving Entity shall not be increased. In determining whether the proposed merger or consolidation would result in an increased credit risk, Lender may consider, among other things, changes in each Borrower's management team, employee base, access to equity markets, venture capital support, financial position and/or disposition of intellectual property rights which may reasonably be anticipated as a result of the transaction. Notwithstanding anything to the contrary in this Section 6.4, Bacterin International, Inc. shall be permitted to (i) liquidate or dissolve in a transaction pursuant to which its assets are transferred to Parent, and (ii) merge with or into Parent in a transaction in which Parent is the surviving entity.

6.5 Sales of Assets. Sell, transfer, lease, license or otherwise dispose of (a "Transfer") any Borrower's assets except (i) exclusive or non-exclusive licenses of Intellectual Property in the ordinary course of business consistent with industry practice, provided that such licenses of Intellectual Property neither result in a legal transfer of title of the licensed Intellectual Property nor have the same effect as a sale of such Intellectual Property; (ii) Transfers of worn-out, obsolete or surplus property (each as determined by each Borrower in its reasonable judgment); (iii) Transfers of Inventory in the ordinary course of business; (iv) Transfers constituting Permitted Liens; (v) Transfers permitted in Sections 6.3, 6.4 and 6.6 hereunder; and (vi) Transfers of Collateral (other than Intellectual Property) for fair consideration and in the ordinary course of its business.

6.6 Loans/Investments. Make or suffer to exist any loans, guaranties, advances, or investments, except:

- (a) accounts receivable in the ordinary course of each Borrower's business;
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- (b) investments in domestic certificates of deposit issued by, and other domestic investments with, financial institutions organized under the laws of the United States or a state thereof, having at least One Hundred Million Dollars (\$100,000,000) in capital and a rating of at least “investment grade” or “A” by Moody’s or any successor rating agency;
- (c) investments in marketable obligations of the United States of America and in open market commercial paper given the highest credit rating by a national credit agency and maturing not more than one year from the creation thereof;
- (d) temporary advances to cover incidental expenses to be incurred in the ordinary course of business;
- (e) investments in joint ventures, strategic alliances, licensing and similar arrangements customary in the Borrowers’ industry and which do not require a Borrower to assume or otherwise become liable for the obligations of any third party not directly related to or arising out of such arrangement or, without the prior written consent of Lender, require a Borrower to transfer ownership of non-cash assets to such joint venture or other entity;
- (f) investments in wholly-owned subsidiaries of a Borrower;
- (g) investments consisting of loans to employees, consultants or directors relating to the purchase of equity securities of any Borrower pursuant to employee stock purchase plans or agreements approved by such Borrower’s Board of Directors;
- (h) investments (including debt obligations) received in connection with the bankruptcy or reorganization of customers or suppliers and in settlement of delinquent obligations of, and other disputes with, customers or suppliers arising in the ordinary course of business;
- (i) investments consisting of deposit and investment accounts in which Lender has been granted a perfected Lien to the extent such accounts are located in the United States;
- (j) investments accepted in connection with Transfers permitted by Section 6.5;
- (k) investments permitted by Parent’s investment policy as approved by Parent’s Board of Directors;
- (l) investments consisting of the endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business;
- (m) other investments by Borrowers not otherwise permitted by Section 6.6 not exceeding One Hundred Thousand Dollars (\$100,000) in cash in the aggregate outstanding at any time.

6.7 Transactions With Related Persons. Directly or indirectly enter into any transaction with or for the benefit of a Related Person on terms more favorable to the Related Person than would have been obtainable in an “arms’ length” dealing, except for: (i) transactions between each Borrower and its Subsidiaries that are not otherwise prohibited by this Agreement; (ii) Subordinated Debt and issuance of equity securities to existing investors that are Related Persons in a bona fide equity financing, and (iii) compensation and fees payable to and indemnity arrangements with officers and directors.

6.8 Other Business. Engage in any material line of business other than the business each Borrower conducts as of the Closing Date and any business related or incidental to such business.

6.9 Financing Statements and Other Actions. Fail to execute and deliver to Lender all financing statements, notices and other documents (including, without limitation, any filings with the United States Patent and Trademark Office and the United States Copyright Office) from time to time reasonably requested by Lender to maintain a perfected first priority security interest in the Collateral in favor of Lender, subject to Permitted Liens; perform such other acts, and execute and deliver to Lender such additional conveyances, assignments, agreements and instruments, as Lender may at any time request in connection with the administration and enforcement of this Agreement or Lender’s rights, powers and remedies hereunder.

6.10 Compliance. Become an “investment company” or controlled by an “investment company,” within the meaning of the Investment Company Act of 1940, or become principally engaged in, or undertake as one of its important activities, the business of extending credit for the purpose of purchasing or carrying margin stock, or use the proceeds of any Loan for such purpose. Fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur, fail to comply with the Federal Fair Labor Standards Act or violate any law or regulation, which violation could reasonably be expected to have a Material Adverse Effect or a material adverse effect on the Collateral or the priority of Lender’s Lien on the Collateral, or permit any of its subsidiaries to do any of the foregoing.

6.11 Other Deposit and Securities Accounts. Maintain any deposit accounts or accounts holding securities owned by a Borrower except (i) Deposit Accounts and investment/securities accounts as set forth in the Supplement, and (ii) other Deposit Accounts and securities/investment accounts, in each case, with respect to which such Borrower and Lender shall have taken such action as Lender reasonably deems necessary to obtain a perfected first priority security interest therein, provided that Lender shall not require control agreements for (i) non-U.S. accounts, and (ii) accounts with deposits limited to deposits subject to a Lien described in clause (l) of the definition of Permitted Liens. The provisions of the previous sentence shall not apply to Deposit Accounts exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of Borrowers' employees.

6.12 Prepayment of Indebtedness. Prepay, redeem or otherwise satisfy in any manner prior to the scheduled repayment thereof any Indebtedness (other than the Loans). Notwithstanding the foregoing, Lender agrees that the conversion or exchange into any Borrower's equity securities of any Indebtedness (other than the Loans) shall not be prohibited by this Section 6.12.

6.13 Repayment of Subordinated Debt. Repay, prepay, redeem or otherwise satisfy in any manner any Subordinated Debt, except in accordance with the terms of any subordination agreement among any Borrower, Lender and the holder(s) of such Subordinated Debt. Notwithstanding the foregoing, Lender agrees that the conversion or exchange into a Borrower's equity securities of any Subordinated Debt and the payment of cash in lieu of fractional shares shall not be prohibited by this Section 6.13.

6.14 Subsidiaries.

(a) Sell, transfer, encumber or otherwise dispose of a Borrower's ownership interest in any Subsidiary other than Permitted Liens and Transfers permitted under Section 6.5.

(b) Cause or permit a Subsidiary to do any of the following: (a) grant Liens on such Subsidiary's assets, except for Liens that would constitute Permitted Liens if incurred by a Borrower and Liens on any property held or acquired by such Subsidiary in the ordinary course of its business securing Indebtedness incurred or assumed for the purpose of financing all or any part of the cost of acquiring such property; provided, that such Lien attaches solely to the property acquired with such Indebtedness and that the principal amount of such Indebtedness does not exceed one hundred percent (100%) of the cost of such property; and (b) issue any additional Shares.

6.15 Leases. Create, incur, assume or suffer to exist any obligation as lessee for the rental or hire of any personal property in an aggregate amount not to exceed \$250,000.

ARTICLE 7 - EVENTS OF DEFAULT

7.1 Events of Default; Acceleration. Upon the occurrence and during the continuation of any Default, the obligation of Lender to make any additional Loan shall be suspended. The occurrence of any of the following that has not been cured within any applicable cure period or otherwise waived by Lender (each, an "Event of Default") shall terminate any obligation of Lender to make any additional Loan; and shall, at the option of Lender (1) make all sums of Basic Interest and principal, all Final Payments, and any Obligations and other amounts owing under any Loan Documents immediately due and payable without notice of default, presentment or demand for payment, protest or notice of nonpayment or dishonor or any other notices or demands, and (2) give Lender the right to exercise any other right or remedy provided by contract or applicable law:

(a) Borrowers shall fail to pay any principal, interest or Final Payment under this Agreement or any Note, or fail to pay any fees or other charges when due under any Loan Document, and such failure continues for three (3) Business Days or more after the same first becomes due; or an Event of Default as defined in any other Loan Document shall have occurred.

(b) Any representation or warranty made, or financial statement, certificate or other document provided, by any Borrower under any Loan Document to which such entity is a party shall prove to have been false or misleading in any material respect when made or deemed made herein (it being recognized by Lender that projections and estimates as to future events are not to be viewed as facts and that the actual results during the period or periods covered by any such projections and estimates may differ from projected or estimated results).

(c) (i) Any Borrower shall fail to pay its debts generally as they become due; or (ii) or shall commence any Insolvency Proceeding with respect to itself, an involuntary Insolvency Proceeding shall be filed against any Borrower, or a custodian, receiver, trustee, assignee for the benefit of creditors, or other similar official, shall be appointed to take possession, custody or control of the properties of any Borrower, and such involuntary Insolvency Proceeding, petition or appointment is acquiesced to by any Borrower or is not dismissed within forty five (45) days; or the dissolution, winding up, or termination of the business or cessation of operations of any Borrower; or a Borrower shall take any corporate action for the purpose of effecting, approving, or consenting to any of the foregoing.

(d) Any Borrower shall be in default beyond any applicable period of grace or cure under any other agreement involving the borrowing of money, the purchase of property, the advance of credit or any other monetary liability of any kind to Lender or to any Person which results in the acceleration of payment of such obligation in an amount in excess of the Threshold Amount.

(e) Any governmental or regulatory authority shall take any judicial or administrative action that has, or would reasonably be expected to have, the effect of suspending or terminating any material portion of a Borrower's business; or any defined benefit pension plan maintained by a Borrower shall have any unfunded liabilities in excess of the Threshold Amount.

(f) Except as permitted in Sections 6.4 and 6.5 of this Agreement, any sale, transfer or other disposition of all or a substantial or material part of the assets of any Borrower, including without limitation to any trust or similar entity, shall occur.

(g) Any judgment(s) singly or in the aggregate in excess of the Threshold Amount shall be entered against any Borrower which remain unsatisfied, unvacated or unstayed pending appeal in the case of any judgment rendered in a federal court for ten (10) Business Days or more after entry thereof, or in the case of any judgment rendered in a state court, for twenty (20) Business Days or more days after entry thereof.

(h) **Reserved.**

(i) Any Borrower shall fail to perform or observe any covenant contained in Article 6 of this Agreement.

(j) Any Borrower shall fail to perform or observe any covenant contained in Article 5 or elsewhere in this Agreement or any other Loan Document (other than a covenant which is dealt with specifically elsewhere in this Article 7) and, if capable of being cured, the breach of such covenant is not cured within 30 days after the sooner to occur of such Borrower's receipt of notice of such breach from Lender or the date on which such breach first becomes known to any officer of such Borrower; provided, however that if such breach is not capable of being cured within such 30-day period and such Borrower timely notifies Lender of such fact and such Borrower diligently pursues such cure, then the cure period shall be extended to the date requested in such Borrower's notice but in no event more than 90 days from the initial breach; provided, further, that such additional 60-day opportunity to cure shall not apply in the case of any failure to perform or observe any covenant which has been the subject of a prior failure within the preceding 180 days or which is a willful and knowing breach by such Borrower.

(k) The occurrence of any default or event of default (howsoever defined) under the A/R Facility.

7.2 Remedies Upon Default. Upon the occurrence and during the continuance of an Event of Default, Lender shall be entitled to, at its option, exercise any or all of the rights and remedies available to a secured party under the UCC or any other applicable law, and exercise any or all of its rights and remedies provided for in this Agreement and in any other Loan Document. The obligations of Borrowers under this Agreement shall continue to be effective or be reinstated, as the case may be, if at any time any payment of any Obligations is rescinded or must otherwise be returned by Lender upon, on account of, or in connection with, the insolvency, bankruptcy or reorganization of any Borrower or otherwise, all as though such payment had not been made.

7.3 Sale of Collateral. Upon the occurrence and during the continuance of an Event of Default, Lender may sell all or any part of the Collateral, at public or private sales, to itself, a wholesaler, retailer or investor, for cash, upon credit or for future delivery, and at such price or prices as Lender may deem commercially reasonable. To the extent permitted by law, each Borrower hereby specifically waives all rights of redemption and any rights of stay or appraisal which it has or may have under any applicable law in effect from time to time. Any such public or private sales shall be held at such times and at such place(s) as Lender may determine. In case of the sale of all or any part of the Collateral on credit or for future delivery, the Collateral so sold may be retained by Lender until the selling price is paid by the purchaser, but Lender shall not incur any liability in case of the failure of such purchaser to pay for the Collateral and, in case of any such failure, such Collateral may be resold. Lender may, instead of exercising its power of sale, proceed to enforce its security interest in the Collateral by seeking a judgment or decree of a court of competent jurisdiction. Without limiting the generality of the foregoing, if an Event of Default is in effect,

(1) Subject to the rights of any third parties, Lender may license, or sublicense, whether general, special or otherwise, and whether on an exclusive or non-exclusive basis, any Copyrights, Patents or Trademarks included in the Collateral throughout the world for such term or terms, on such conditions and in such manner as Lender shall in its sole discretion determine;

(2) Lender may (without assuming any obligations or liability thereunder), at any time and from time to time, enforce (and shall have the exclusive right to enforce) against any licensee or sublicensee all rights and remedies of any Borrower in, to and under any Copyright Licenses, Patent Licenses or Trademark Licenses and take or refrain from taking any action under any thereof, and each Borrower hereby releases Lender from, and agrees to hold Lender free and harmless from and against any claims arising out of, any lawful action so taken or omitted to be taken with respect thereto other than claims arising out of Lender's gross negligence or willful misconduct; and

(3) Upon request by Lender, each Borrower will execute and deliver to Lender a power of attorney, in form and substance reasonably satisfactory to Lender for the implementation of any lease, assignment, license, sublicense, grant of option, sale or other disposition of a Copyright, Patent or Trademark. In the event of any such disposition pursuant to this clause 3, each Borrower shall supply its know-how and expertise relating to the products or services made or rendered in connection with Patents, the manufacture and sale of the products bearing Trademarks, and its customer lists and other records relating to such Copyrights, Patents or Trademarks and to the distribution of said products, to Lender.

(4) If, at any time when Lender shall determine to exercise its right to sell the whole or any part of the Shares hereunder, such Shares or the part thereof to be sold shall not, for any reason whatsoever, be effectively registered under the Securities Act (or any similar statute), then Lender may, in its discretion (subject only to applicable requirements of law), sell such Shares or part thereof by private sale in such manner and under such circumstances as Lender may deem necessary or advisable, but subject to the other requirements of this Article 7, and shall not be required to effect such registration or to cause the same to be effected. Without limiting the generality of the foregoing, in any such event, Lender in its discretion may (i) in accordance with applicable securities laws proceed to make such private sale notwithstanding that a registration statement for the purpose of registering such Shares or part thereof could be or shall have been filed under the Securities Act (or similar statute), (ii) approach and negotiate with a single possible purchaser to effect such sale, and (iii) restrict such sale to a purchaser who is an accredited investor under the Securities Act and who will represent and agree that such purchaser is purchasing for its own account, for investment and not with a view to the distribution or sale of such Shares or any part thereof. In addition to a private sale as provided above in this Article 7, if any of the Shares shall not be freely distributable to the public without registration under the Securities Act (or similar statute) at the time of any proposed sale pursuant to this Article 7, then Lender shall not be required to effect such registration or cause the same to be effected but, in its discretion (subject only to applicable requirements of law), may require that any sale hereunder (including a sale at auction) be conducted subject to restrictions:

(A) as to the financial sophistication and ability of any Person permitted to bid or purchase at any such sale;

(B) as to the content of legends to be placed upon any certificates representing the Shares sold in such sale, including restrictions on future transfer thereof;

(C) as to the representations required to be made by each Person bidding or purchasing at such sale relating to such Person's access to financial information about a Borrower or any of its Subsidiaries and such Person's intentions as to the holding of the Shares so sold for investment for its own account and not with a view to the distribution thereof; and

(D) as to such other matters as Lender may, in its discretion, deem necessary or appropriate in order that such sale (notwithstanding any failure so to register) may be effected in compliance with the Bankruptcy Code and other laws affecting the enforcement of creditors' rights and the Securities Act and all applicable state securities laws.

(5) Each Borrower recognizes that Lender may be unable to effect a public sale of any or all the Shares and may be compelled to resort to one or more private sales thereof in accordance with clause (4) above. Each Borrower also acknowledges that any such private sale may result in prices and other terms less favorable to the seller than if such sale were a public sale and, notwithstanding such circumstances, agrees that any such private sale shall not be deemed to have been made in a commercially unreasonable manner solely by virtue of such sale being private. Lender shall be under no obligation to delay a sale of any of the Shares for the period of time necessary to permit the applicable Subsidiary to register such securities for public sale under the Securities Act, or under applicable state securities laws, even if Borrowers and/or the Subsidiary would agree to do so.

7.4 Borrower's Obligations Upon Default. Upon the request of Lender after the occurrence and during the continuance of an Event of Default, each Borrower will:

(a) Assemble and make available to Lender the Collateral at such place(s) as Lender shall reasonably designate, segregating all Collateral so that each item is capable of identification; and

(b) Subject to the rights of any lessor, permit Lender, by Lender's officers, employees, agents and representatives, to enter any premises where any Collateral is located, to take possession of the Collateral, to complete the processing, manufacture or repair of any Collateral, and to remove the Collateral, or to conduct any public or private sale of the Collateral, all without any liability of Lender for rent or other compensation for the use of each Borrower's premises.

ARTICLE 8 - SPECIAL COLLATERAL PROVISIONS

8.1 Compromise and Collection. Borrowers and Lender recognize that setoffs, counterclaims, defenses and other claims may be asserted by obligors with respect to certain of the Rights to Payment; that certain of the Rights to Payment may be or become uncollectible in whole or in part; and that the expense and probability of success of litigating a disputed Right to Payment may exceed the amount that reasonably may be expected to be recovered with respect to such Right to Payment. Borrowers hereby authorizes Lender, after and during the continuance of an Event of Default, to compromise with the obligor, accept in full payment of any Right to Payment such amount as Lender shall negotiate with the obligor, or abandon any Right to Payment. Any such action by Lender shall be considered commercially reasonable so long as Lender acts in good faith based on information known to it at the time it takes any such action.

8.2 Performance of Borrowers' Obligations. Without having any obligation to do so, upon reasonable prior notice to any Borrower, Lender may perform or pay any obligation which such Borrower have agreed to perform or pay under this Agreement, including, without limitation, the payment or discharge of taxes or Liens levied or placed on or threatened against the Collateral. In so performing or paying, Lender shall determine the action to be taken and the amount necessary to discharge such obligations. Each Borrower shall reimburse Lender on demand for any amounts paid by Lender pursuant to this Section, which amounts shall constitute Obligations secured by the Collateral and shall bear interest from the date of demand at the Default Rate.

8.3 Power of Attorney. For the purpose of protecting and preserving the Collateral and Lender's rights under this Agreement, each Borrower hereby irrevocably appoints Lender, with full power of substitution, as its attorney-in-fact with full power and authority, after the occurrence and during the continuance of an Event of Default, to do any act which each such Borrower is obligated to do hereunder; to exercise such rights with respect to the Collateral as each such Borrower might exercise; to use such Inventory, Equipment, Fixtures or other property as Borrowers might use; to enter each Borrower's premises; to give notice of Lender's security interest in, and to collect the Collateral; and before or after Default, to execute and file in each Borrower's name any financing statements, amendments and continuation statements, account control agreements or other Security Documents necessary or desirable to create, maintain, perfect or continue the perfection of Lender's security interests in the Collateral. Each Borrower hereby ratifies all that Lender shall lawfully do or cause to be done by virtue of this appointment.

8.4 Authorization for Lender to Take Certain Action. The power of attorney created in Section 8.3 is a power coupled with an interest and shall be irrevocable. The powers conferred on Lender hereunder are solely to protect its interests in the Collateral and shall not impose any duty upon Lender to exercise such powers. Lender shall be accountable only for amounts that it actually receives as a result of the exercise of such powers and in no event shall Lender or any of its directors, officers, employees, agents or representatives be responsible to any Borrower for any act or failure to act, except for gross negligence or willful misconduct. After the occurrence and during the continuance of an Event of Default, Lender may exercise this power of attorney without notice to or assent of any Borrower, in the name of any such Borrower, or in Lender's own name, from time to time in Lender's sole discretion and at Borrower's expense. To further carry out the terms of this Agreement, after the occurrence and during the continuance of an Event of Default, Lender may:

(a) Execute any statements or documents or take possession of, and endorse and collect and receive delivery or payment of, any checks, drafts, notes, acceptances or other instruments and documents constituting Collateral, or constituting the payment of amounts due and to become due or any performance to be rendered with respect to the Collateral.

(b) Sign and endorse any invoices, freight or express bills, bills of lading, storage or warehouse receipts; drafts, certificates and statements under any commercial or standby letter of credit relating to Collateral; assignments, verifications and notices in connection with Accounts; or any other documents relating to the Collateral, including without limitation the Records.

(c) Use or operate Collateral or any other property of any Borrower for the purpose of preserving or liquidating Collateral.

(d) File any claim or take any other action or proceeding in any court of law or equity or as otherwise deemed appropriate by Lender for the purpose of collecting any and all monies due or securing any performance to be rendered with respect to the Collateral.

(e) Commence, prosecute or defend any suits, actions or proceedings or as otherwise deemed appropriate by Lender for the purpose of protecting or collecting the Collateral. In furtherance of this right, upon the occurrence and during the continuance of an Event of Default, Lender may apply for the appointment of a receiver or similar official to operate each Borrower's business.

(f) Prepare, adjust, execute, deliver and receive payment under insurance claims, and collect and receive payment of and endorse any instrument in payment of loss or returned premiums or any other insurance refund or return, and apply such amounts at Lender's sole discretion, toward repayment of the Obligations or replacement of the Collateral.

8.5 Application of Proceeds. Any Proceeds and other monies or property received by Lender pursuant to the terms of this Agreement or any Loan Document may be applied by Lender first to the payment of expenses of collection, including without limitation reasonable attorneys' fees, and then to the payment of the Obligations in such order of application as Lender may elect.

8.6 Deficiency. If the Proceeds of any disposition of the Collateral are insufficient to cover all costs and expenses of such sale and the payment in full of all the Obligations, plus all other sums required to be expended or distributed by Lender, then each Borrower shall be liable, on a joint and several basis, for any such deficiency.

8.7 Lender Transfer. Upon the transfer of all or any part of the Obligations, Lender may transfer all or part of the Collateral and shall be fully discharged thereafter from all liability and responsibility with respect to such Collateral so transferred, and the transferee shall be vested with all the rights and powers of Lender hereunder with respect to such Collateral so transferred, but with respect to any Collateral not so transferred, Lender shall retain all rights and powers hereby given.

8.8 Lender's Duties.

(a) Lender shall use reasonable care in the custody and preservation of any Collateral in its possession. Without limitation on other conduct which may be considered the exercise of reasonable care, Lender shall be deemed to have exercised reasonable care in the custody and preservation of such Collateral if such Collateral is accorded treatment substantially equal to that which Lender accords its own property, it being understood that Lender shall not have any responsibility for ascertaining or taking action with respect to calls, conversions, exchanges, maturities, declining value, tenders or other matters relative to any Collateral, regardless of whether Lender has or is deemed to have knowledge of such matters; or taking any necessary steps to preserve any rights against any Person with respect to any Collateral. Under no circumstances shall Lender be responsible for any injury or loss to the Collateral, or any part thereof, arising from any cause beyond the reasonable control of Lender.

(b) Lender may at any time deliver the Collateral or any part thereof to any Borrower and the receipt of such Borrower shall be a complete and full acquittance for the Collateral so delivered, and Lender shall thereafter be discharged from any liability or responsibility therefor.

(c) Neither Lender, nor any of its directors, officers, employees, agents, attorneys or any other person affiliated with or representing Lender shall be liable for any claims, demands, losses or damages, of any kind whatsoever, made, claimed, incurred or suffered by any Borrower or any other party through the ordinary negligence of Lender, or any of its directors, officers, employees, agents, attorneys or any other person affiliated with or representing Lender.

8.9 Termination of Security Interests. Upon the payment in full of the Obligations (other than inchoate indemnity obligations) and satisfaction of all Borrowers' obligations under this Agreement and the other Loan Documents, and if Lender has no further obligations under its Commitment, the security interest granted hereby shall terminate and all rights to the Collateral shall revert to Borrowers. Upon any such termination, the Lender shall, at Borrowers' expense, execute and deliver to Borrowers such documents as Borrowers shall reasonably request to evidence such termination.

ARTICLE 9 - GENERAL PROVISIONS

9.1 Notices. Any notice given by any party under any Loan Document shall be in writing and personally delivered, sent by overnight courier, or United States mail, postage prepaid, or sent by facsimile, or other authenticated message, charges prepaid, to the other party's or parties' addresses shown on the Supplement. Each party may change the address or facsimile number to which notices, requests and other communications are to be sent by giving written notice of such change to each other party. Notice given by hand delivery shall be deemed received on the date delivered; if sent by overnight courier, on the next Business Day after delivery to the courier service; if by first class mail, on the third Business Day after deposit in the U.S. Mail; and if by facsimile, on the date of transmission.

9.2 Binding Effect. The Loan Documents shall be binding upon and inure to the benefit of each Borrower and Lender and their respective successors and assigns; provided, however, that no Borrower may assign or transfer such Borrower's rights or obligations under any Loan Document. Lender reserves the right to sell, assign, transfer, negotiate or grant participations in all or any part of, or any interest in, Lender's rights and obligations under the Loan Documents. In connection with any of the foregoing, Lender may disclose all documents and information which Lender now or hereafter may have relating to the Loans, any Borrower, or such Borrower's business, provided that the person who receives such information shall have agreed in writing in advance to maintain the confidentiality of such information on terms no less protective of such Borrower than those set forth in Section 9.13.

9.3 No Waiver. Any waiver, consent or approval by Lender of any Event of Default or breach of any provision, condition, or covenant of any Loan Document must be in writing and shall be effective only to the extent set forth in writing. No waiver of any breach or default shall be deemed a waiver of any later breach or default of the same or any other provision of any Loan Document. No failure or delay on the part of Lender in exercising any power, right, or privilege under any Loan Document shall operate as a waiver thereof, and no single or partial exercise of any such power, right, or privilege shall preclude any further exercise thereof or the exercise of any other power, right or privilege. Lender has the right at its sole option to continue to accept interest and/or principal payments due under the Loan Documents after default, and such acceptance shall not constitute a waiver of said default or an extension of the maturity of any Loan unless Lender agrees otherwise in writing.

9.4 Rights Cumulative. All rights and remedies existing under the Loan Documents are cumulative to, and not exclusive of, any other rights or remedies available under contract or applicable law.

9.5 Unenforceable Provisions. Any provision of any Loan Document executed by Borrowers which is prohibited or unenforceable in any jurisdiction, shall be so only as to such jurisdiction and only to the extent of such prohibition or unenforceability, but all the remaining provisions of any such Loan Document shall remain valid and enforceable.

9.6 Accounting Terms. Except as otherwise provided in this Agreement, accounting terms and financial covenants and information shall be determined and prepared in accordance with GAAP.

9.7 Indemnification; Exculpation. Borrowers shall pay and protect, defend and indemnify Lender and Lender's employees, officers, directors, shareholders, affiliates, correspondents, agents and representatives (other than Lender, collectively "Agents") against, and hold Lender and each such Agent harmless from, all claims, actions, proceedings, liabilities, damages, losses, expenses (including, without limitation, attorneys' fees and costs) and other amounts incurred by Lender and each such Agent, arising from (i) the matters contemplated by this Agreement or any other Loan Documents, (ii) any dispute between a Borrower and a third party, or (iii) any contention that any Borrower has failed to comply with any law, rule, regulation, order or directive applicable to any Borrower's business; **provided, however**, that this indemnification shall not apply to any of the foregoing incurred solely as the result of Lender's or any Agent's gross negligence or willful misconduct. This indemnification shall survive the payment and satisfaction of all of Borrowers' Obligations to Lender.

9.8 Reimbursement. Subject to the limitation set forth in Section 6 of the Supplement, Borrowers shall reimburse Lender for all reasonable costs and expenses, including without limitation reasonable attorneys' fees and disbursements expended or incurred by Lender in any arbitration, mediation, judicial reference, legal action or otherwise in connection with (a) the preparation and negotiation of the Loan Documents, (b) the amendment and enforcement of the Loan Documents, including without limitation during any workout, attempted workout, and/or in connection with the rendering of legal advice as to Lender's rights, remedies and obligations under the Loan Documents, (c) collecting any sum which becomes due Lender under any Loan Document, (d) any proceeding for declaratory relief, any counterclaim to any proceeding, or any appeal, or (e) the protection, preservation or enforcement of any rights of Lender. For the purposes of this section, attorneys' fees shall include, without limitation, fees incurred in connection with the following: (1) contempt proceedings; (2) discovery; (3) any motion, proceeding or other activity of any kind in connection with an Insolvency Proceeding; (4) garnishment, levy, and debtor and third party examinations; and (5) postjudgment motions and proceedings of any kind, including without limitation any activity taken to collect or enforce any judgment. All of the foregoing costs and expenses shall be payable upon demand by Lender, and if not paid within forty-five (45) days of presentation of invoices shall bear interest at the Default Rate.

9.9 Execution in Counterparts. This Agreement may be executed in any number of counterparts which, when taken together, shall constitute but one agreement.

9.10 Entire Agreement. The Loan Documents are intended by the parties as the final expression of their agreement and therefore contain the entire agreement between the parties and supersede all prior understandings or agreements concerning the subject matter hereof. This Agreement may be amended only in a writing signed by each Borrower and Lender.

9.11 Governing Law and Jurisdiction.

(a) THIS AGREEMENT AND THE LOAN DOCUMENTS SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF CALIFORNIA.

(b) ANY LEGAL ACTION OR PROCEEDING WITH RESPECT TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT MAY BE BROUGHT IN THE COURTS OF THE STATE OF CALIFORNIA OR OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF CALIFORNIA, AND BY EXECUTION AND DELIVERY OF THIS AGREEMENT, EACH OF BORROWER AND LENDER CONSENTS, FOR ITSELF AND IN RESPECT OF ITS PROPERTY, TO THE NON-EXCLUSIVE JURISDICTION OF THOSE COURTS. EACH OF BORROWER AND LENDER IRREVOCABLY WAIVES ANY OBJECTION, INCLUDING ANY OBJECTION TO THE LAYING OF VENUE OR BASED ON THE GROUNDS OF FORUM NON CONVENIENS, WHICH IT MAY NOW OR HEREAFTER HAVE TO THE BRINGING OF ANY ACTION OR PROCEEDING IN SUCH JURISDICTION IN RESPECT OF THIS AGREEMENT OR ANY DOCUMENT RELATED HERETO. BORROWER AND LENDER EACH WAIVE PERSONAL SERVICE OF ANY SUMMONS, COMPLAINT OR OTHER PROCESS, WHICH MAY BE MADE BY ANY OTHER MEANS PERMITTED BY CALIFORNIA LAW.

9.12 Waiver of Jury Trial. TO THE EXTENT NOT PROHIBITED BY APPLICABLE LAW, BORROWER AND LENDER EACH WAIVES ITS RESPECTIVE RIGHTS TO A TRIAL BY JURY OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF OR RELATED TO THIS AGREEMENT, THE OTHER LOAN DOCUMENTS, OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY, IN ANY ACTION, PROCEEDING OR OTHER LITIGATION OF ANY TYPE BROUGHT BY ANY OF THE PARTIES AGAINST ANY OTHER PARTY OR ANY PARTICIPANT OR ASSIGNEE, WHETHER WITH RESPECT TO CONTRACT CLAIMS, TORT CLAIMS, OR OTHERWISE. BORROWER AND LENDER EACH AGREES THAT ANY SUCH CLAIM OR CAUSE OF ACTION SHALL BE TRIED BY A COURT TRIAL WITHOUT A JURY. WITHOUT LIMITING THE FOREGOING, THE PARTIES FURTHER AGREE THAT THEIR RESPECTIVE RIGHT TO A TRIAL BY JURY IS WAIVED BY OPERATION OF THIS SECTION AS TO ANY ACTION, COUNTERCLAIM OR OTHER PROCEEDING WHICH SEEMS, IN WHOLE OR IN PART, TO CHALLENGE THE VALIDITY OR ENFORCEABILITY OF THIS AGREEMENT OR THE OTHER LOAN DOCUMENTS OR ANY PROVISION HEREOF OR THEREOF. THIS WAIVER SHALL APPLY TO ANY SUBSEQUENT AMENDMENTS, RENEWALS, SUPPLEMENTS OR MODIFICATIONS TO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS.

9.13 Obligations and Restrictions Regarding Confidential Information. Lender shall maintain the confidentiality of Borrowers' confidential information. Lender's standard of care shall be deemed to have been complied with under this Section 9.13, if in handling any confidential information of the Borrowers', Lender shall exercise the same degree of care that it exercises for its own proprietary information, but disclosure of information may be made: (i) to Lender's subsidiaries or Affiliates in connection with their business with any Borrower (subject to the same confidentiality obligation set forth herein); (ii) to prospective transferees or purchasers of any interest in the Loans (subject to the same confidentiality obligation set forth herein); (iii) as required by law, regulation, subpoena, or other order, (iv) as required in connection with Lender's examination or audit; (v) as Lender considers appropriate in exercising remedies under this Agreement; and (vi) to Lender's attorneys, accountants and other advisors.

ARTICLE 10 – CROSS-CORPORATE GUARANTEES

10.1 Guaranty. In consideration of the execution and delivery by Lender of this Agreement and the making of Loans to Borrowers hereunder, Borrowers hereby jointly and severally guarantee absolutely and unconditionally to Lender the due and punctual payment, when and as due (whether upon demand, at maturity, by reason of acceleration or otherwise), of all liabilities and obligations under this Agreement and the other Loan Documents and agree to pay any and all expenses (including reasonable legal fees and disbursements) which may be incurred by Lender in enforcing its rights under this guaranty. The liability of Borrowers under this guaranty shall be joint and several, unlimited and unconditional, and this guaranty shall be a continuing guaranty of any and all Notes given as evidence of or in extension or renewal of any of the Obligations. Each Borrower acknowledges that it will benefit from extensions of credit by Lender to the other Borrower, as their businesses and operations are interdependent and a part of a single enterprise.

10.2 Waivers. Each Borrower, to the fullest extent permitted by applicable law, hereby waives (i) diligence, presentment, demand and protest with respect to any instrument at any time evidencing any of the Obligations, (ii) any requirement that Lender exhaust any right or take any action against any other Person or any of the Collateral or other property at any time securing any of the Obligations, (iii) the benefit of all principles or provisions of applicable law which are or might be in conflict with the terms of this guaranty, (iv) notice of acceptance hereof, (v) notice of the occurrence of an Event of Default, (vi) notice of any and all favorable and unfavorable information, financial or other, about any other Borrower, heretofore, now or hereafter learned or acquired by a Borrower, (vii) notice of the existence or creation of any of the Obligations, (viii) notice of any alterations, amendments, increase, extension or exchange of any of the Obligations so long as the same are effected in accordance with the terms of this Agreement; (ix) notice of any amendments, modifications or supplements of or to the Intellectual Property Security Agreement so long as the same are effected in accordance with the terms of the Intellectual Property Security Agreement, (x) all diligence in collection or protection of or realization upon the Obligations or the Collateral and (xi) the right to require Lender to proceed against the Borrowers or any Borrower on any of the Obligations. Each Borrower hereby further consents that the time of payment of any of the Obligations may be extended and the Borrowers will remain bound under this guaranty notwithstanding such extensions, whether or not referred to above, which might otherwise constitute a legal or equitable discharge of a guaranty.

10.3 Subrogation; Subordination. No Borrower shall have any right of subrogation, contribution, reimbursement or indemnity whatsoever, nor any right of recourse to security for any of the Obligations, and nothing shall discharge or satisfy the liability of any Borrower hereunder, until the termination of this Agreement and the irrevocable satisfaction in full of, or provision for, the Obligations; and any and all present and future debts and obligations of each Borrower to the others are hereby postponed in favor of and subordinated to the full payment and performance of all present and future Obligations.

10.4 Release of Collateral. The joint and several liability of Borrowers shall continue notwithstanding and shall not be impaired and affected by any release of any Collateral or by the release of any one or more Persons liable for any of the Obligations, whether as principal, surety, guarantor, indemnitor or otherwise.

10.5 Other Waivers. To the extent permitted by law, each Borrower hereby waives any right of set-off and any and all other rights, benefits, protections and other defenses available to a surety or guarantor now or at any time hereafter, including, without limitation, under California Civil Code 2787 to 2855, inclusive, and similar applicable laws of other jurisdictions.

10.6 Statutory Waiver of Rights and Defenses Regarding Election of Remedies. Each Borrower hereby waives all rights and defenses arising out of the election of remedies by Lender, even though that election of remedies, such as a nonjudicial foreclosure with respect to security for a guaranteed obligation, has destroyed such Borrower's rights of subrogation and reimbursement against the other Borrower by the operation of Section 580d of the California Code of Civil Procedure or otherwise.

10.7 Financial Condition of Borrowers. Each Borrower represents and warrants that it is fully aware of the financial condition of the other Borrower, and each Borrower delivers its guarantee based solely upon its own independent investigation of such other Borrower's financial condition and in no part upon any representation or statement of Lender with respect thereto. Each Borrower further represents and warrants that it is in a position to and hereby does assume full responsibility for obtaining such additional information concerning the other Borrower's financial condition as such Borrower may deem material to its obligations hereunder, and such Borrower is not relying upon, nor expecting Lender to furnish it any information in Lender's possession concerning the other Borrower's financial condition or concerning any circumstances bearing on the existence or creation, or the risk of nonpayment or nonperformance of the Obligations.

10.8 Advice of Counsel. Each Borrower acknowledges that it has either obtained the advice of counsel or has had the opportunity to obtain such advice in connection with the terms and provisions of this Section 10.

10.9 Limitation of Guarantee Obligations. In any action or proceeding involving any state corporate law, or any state or federal bankruptcy, insolvency, reorganization or other law affecting the rights of creditors generally, if the obligations of a Borrower under its guarantee in this Section 10 would otherwise be held or determined to be void, invalid or unenforceable, or subordinated to the claims of any other creditors, on account of the amount of its liability under its guarantee, then, notwithstanding, any other provision of this Section 10, to the contrary, the amount of such liability shall, without further action of such Borrower, Lender or any other person, be automatically limited and reduced to the highest amount which is valid and enforceable and not subordinated to the claims of other creditors as determined in such action or proceeding.

ARTICLE 11 - DEFINITIONS

The definitions appearing in this Agreement or any Supplement shall be applicable to both the singular and plural forms of the defined terms:

“Account” means any “account,” as such term is defined in the UCC, now owned or hereafter acquired by a Borrower or in which a Borrower now holds or hereafter acquires any interest and, in any event, shall include, without limitation, all accounts receivable, book debts and other forms of obligations (other than forms of obligations evidenced by Chattel Paper, Documents or Instruments) now owned or hereafter received or acquired by or belonging or owing to a Borrower (including, without limitation, under any trade name, style or division thereof) whether arising out of goods sold or services rendered by such Borrower or from any other transaction, whether or not the same involves the sale of goods or services by such Borrower (including, without limitation, any such obligation that may be characterized as an account or contract right under the UCC) and all of a Borrower’s rights in, to and under all purchase orders or receipts now owned or hereafter acquired by it for goods or services, and all of such Borrower’s rights to any goods represented by any of the foregoing (including, without limitation, unpaid seller’s rights of rescission, replevin, reclamation and stoppage in transit and rights to returned, reclaimed or repossessed goods), and all monies due or to become due to a Borrower under all purchase orders and contracts for the sale of goods or the performance of services or both by such Borrower or in connection with any other transaction (whether or not yet earned by performance on the part of such Borrower), now in existence or hereafter occurring, including, without limitation, the right to receive the proceeds of said purchase orders and contracts, and all collateral security and guarantees of any kind given by any Person with respect to any of the foregoing.

“Affiliate” means any Person which directly or indirectly controls, is controlled by, or is under common control with any Borrower. “Control,” “controlled by” and “under common control with” mean direct or indirect possession of the power to direct or cause the direction of management or policies (whether through ownership of voting securities, by contract or otherwise); provided, that control shall be conclusively presumed when any Person or affiliated group directly or indirectly owns five percent (5%) or more of the securities having ordinary voting power for the election of directors of a corporation.

“Agreement” means this Loan and Security Agreement and each Supplement thereto, as each may be amended or supplemented from time to time.

“Bankruptcy Code” means the Federal Bankruptcy Reform Act of 1978 (11 U.S.C. §101, et seq.), as amended.

“A/R Facility” is defined in the Supplement.

“Bank” is defined in the Supplement.

“Basic Interest” means the fixed rate of interest payable on the outstanding balance of each Loan at the applicable Designated Rate.

“Borrowing Date” means the Business Day on which the proceeds of a Loan are disbursed by Lender.

“Borrowing Request” means a written request from Borrowers in substantially the form of Exhibit “B” to the Supplement, requesting the funding of one or more Loans on a particular Borrowing Date.

“Business Day” means any day other than a Saturday, Sunday or other day on which commercial banks in New York City or San Francisco are authorized or required by law to close.

“Chattel Paper” means any “chattel paper,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“Closing Date” means the date of this Agreement.

“Collateral” means, with respect to a Borrower, all of such Borrower’s right, title and interest in and to the following property, whether now owned or hereafter acquired and wherever located: (a) all Receivables; (b) all Equipment; (c) all Fixtures; (d) all General Intangibles; (e) all Inventory; (f) all Investment Property; (g) all Deposit Accounts; (h) all Shares; (i) all other Goods and personal property of Borrowers, whether tangible or intangible and whether now or hereafter owned or existing, leased, consigned by or to, or acquired by, Borrowers and wherever located; (j) all Records; and (k) all Proceeds of each of the foregoing and all accessions to, substitutions and replacements for, and rents, profits and products of each of the foregoing. Notwithstanding the foregoing the term “Collateral” shall not include (i) more than sixty-five percent (65%) of the issued and outstanding capital stock, membership units or other securities entitled to vote owned or held of record by any Borrower in any Subsidiary that is a controlled foreign corporation (as defined in the Internal Revenue Code); (ii) property (including any attachments, accessions or replacements) that is subject to a Lien that is permitted pursuant to clause (c) of the definition of Permitted Liens, if the grant of a security interest with respect to such property pursuant to this Agreement would be prohibited by the agreement creating such Permitted Lien or would otherwise constitute a default thereunder, provided, that such property will be deemed “Collateral” hereunder upon the termination and release of such Permitted Lien; (iii) “intent-to-use” trademarks at all times prior to the first use thereof, whether by the actual use thereof in commerce, the recording of a statement of use with the United States Patent and Trademark Office or otherwise, but only to the extent the granting of a security interest in such “intent to use” trademarks would be contrary to applicable law; (iv) any contract, instrument or chattel paper in which any Borrower has any right, title or interest if and to the extent such contract, instrument or chattel paper includes a provision containing a restriction on assignment such that the creation of a security interest in the right, title or interest of such Borrower therein would be prohibited and would, in and of itself, cause or result in a default thereunder enabling another person party to such contract, instrument or chattel paper to enforce any remedy with respect thereto; provided, however, that the foregoing exclusion shall not apply if (x) such prohibition has been waived or such other person has otherwise consented to the creation hereunder of a security interest in such contract, instrument or chattel paper, or (y) such prohibition would be rendered ineffective pursuant to Sections 9-407(a) or 9-408(a) of the UCC, as applicable and as then in effect in any relevant jurisdiction, or any other applicable law (including the Bankruptcy Code) or principles of equity); provided further that immediately upon the ineffectiveness, lapse or termination of any such provision, the term “Collateral” shall include, and each Borrower shall be deemed to have granted a security interest in, all its rights, title and interests in and to such contract, instrument or chattel paper as if such provision had never been in effect; and provided further that the foregoing exclusion shall in no way be construed so as to limit, impair or otherwise affect Lender’s unconditional continuing security interest in and to all rights, title and interests of any Borrowers in or to any payment obligations or other rights to receive monies due or to become due under any such contract, instrument or chattel paper and in any such monies and other proceeds of such contract, instrument or chattel paper; (v) deposits subject to a Lien described in clauses (l) of the definition of Permitted Liens, or (vi) any real property of any Borrower.

“Commitment” means the obligation of Lender to make Loans to Borrowers up to the aggregate principal amount set forth in the Supplement.

“Copyright License” means any written agreement granting any right to use any Copyright or Copyright registration now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“Copyrights” means all of the following now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest: (i) all copyrights, whether registered or unregistered, held pursuant to the laws of the United States, any State thereof or of any other country; (ii) all registrations, applications and recordings in the United States Copyright Office or in any similar office or agency of the United States, any State thereof or any other country; (iii) all continuations, renewals or extensions thereof; and (iv) any registrations to be issued under any pending applications.

“Default” means an event which with the giving of notice, passage of time, or both would constitute an Event of Default.

“Default Rate” means eighteen percent (18%) per annum.

“Deposit Accounts” means any “deposit accounts,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“Designated Rate” means the rate of interest per annum described in the Supplement as being applicable to an outstanding Loan from time to time.

“Disclosure Letter” means that certain letter, dated as of the date of this Agreement, containing certain schedules, delivered by Borrowers to Lender.

“Documents” means any “documents,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“Environmental Laws” means all federal, state or local laws, statutes, common law duties, rules, regulations, ordinances and codes, together with all administrative orders, directed duties, requests, licenses, authorizations and permits of, and agreements with, any governmental authorities, in each case relating to environmental, health, or safety matters.

“Equipment” means any “equipment,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest and any and all additions, substitutions and replacements of any of the foregoing, wherever located, together with all attachments, components, parts, equipment and accessories installed thereon or affixed thereto.

“Event of Default” means any event described in Section 7.1.

“Final Payment” means, with respect to a Loan, an amount equal to that percentage of the original principal amount of such Loan and payable at the time specified in the Supplement or the Note evidencing such Loan.

“Fixtures” means any “fixtures,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“GAAP” means generally accepted accounting principles and practices consistent with those principles and practices promulgated or adopted by the Financial Accounting Standards Board and the Board of the American Institute of Certified Public Accountants, their respective predecessors and successors. Each accounting term used but not otherwise expressly defined herein shall have the meaning given it by GAAP.

“General Intangibles” means any “general intangibles,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest and, in any event, shall include, without limitation, all right, title and interest that Borrowers may now or hereafter have in or under any contract, all customer lists, Copyrights, Trademarks, Patents, websites, domain names, and all applications therefor and reissues, extensions, or renewals thereof, other rights to Intellectual Property, interests in partnerships, joint ventures and other business associations, Licenses, permits, trade secrets, proprietary or confidential information, inventions (whether or not patented or patentable), technical information, procedures, designs, knowledge, know-how, software, data bases, data, skill, expertise, recipes, experience, processes, models, drawings, materials and records, goodwill (including, without limitation, the goodwill associated with any Trademark, Trademark registration or Trademark licensed under any Trademark License), claims in or under insurance policies, including unearned premiums, uncertificated securities, money, cash or cash equivalents, deposit, checking and other bank accounts, rights to sue for past, present and future infringement of Copyrights, Trademarks and Patents, rights to receive tax refunds and other payments and rights of indemnification.

“Goods” means any “goods,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“Indebtedness” of any Person means at any date, without duplication and without regard to whether matured or unmatured, absolute or contingent: (i) all obligations of such Person for borrowed money; (ii) all obligations of such Person evidenced by bonds, debentures, notes, or other similar instruments; (iii) all obligations of such Person to pay the deferred purchase price of property or services, except trade accounts payable arising in the ordinary course of business; (iv) all obligations of such Person as lessee under capital leases; (v) all obligations of such Person to reimburse or prepay any bank or other Person in respect of amounts paid under a letter of credit, banker’s acceptance, or similar instrument, whether drawn or undrawn; (vi) all obligations of such Person to purchase securities which arise out of or in connection with the sale of the same or substantially similar securities; (vii) all obligations of such Person to purchase, redeem, exchange, convert or otherwise acquire for value any capital stock of such Person or any warrants, rights or options to acquire such capital stock, now or hereafter outstanding, except to the extent that such obligations remain performable solely at the option of such Person; (viii) all obligations to repurchase assets previously sold (including any obligation to repurchase any accounts or chattel paper under any factoring, receivables purchase, or similar arrangement); (ix) obligations of such Person under interest rate swap, cap, collar or similar hedging arrangements; and (x) all obligations of others of any type described in clause (i) through clause (ix) above guaranteed by such Person.

“Insolvency Proceeding” means with respect to a Person (a) any case, action or proceeding before any court or other governmental authority relating to bankruptcy, reorganization, insolvency, liquidation, receivership, dissolution, winding-up or relief of debtors with respect to such Person, or (b) any general assignment for the benefit of creditors, composition, marshalling of assets for creditors, or other, similar arrangement in respect of such Person’s creditors generally or any substantial portion of its creditors, undertaken under U.S. Federal, state or foreign law, including the Bankruptcy Code, but in each case, excluding any avoidance or similar action against such Person commenced by an assignee for the benefit of creditors, bankruptcy trustee, debtor in possession, or other representative of another Person or such other Person’s estate.

“Instruments” means any “instrument,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“Intellectual Property” means all Copyrights, Trademarks, Patents, Licenses, trade secrets, source codes, customer lists, proprietary or confidential information, inventions (whether or not patented or patentable), technical information, procedures, designs, knowledge, know-how, software, data bases, skill, expertise, experience, processes, models, drawings, materials, records and goodwill associated with the foregoing.

“Intellectual Property Security Agreement” means any Intellectual Property Security Agreement executed and delivered by Borrowers in favor of Lender, as the same may be amended, supplemented, or restated from time to time.

“Inventory” means any “inventory,” as such term is defined in the UCC, wherever located, now owned or hereafter acquired by a Borrower or in which a Borrower now holds or hereafter acquires any interest, and, in any event, shall include, without limitation, all inventory, goods and other personal property that are held by or on behalf of such Borrower for sale or lease or are furnished or are to be furnished under a contract of service or that constitute raw materials, work in process or materials used or consumed or to be used or consumed in such Borrower’s business, or the processing, packaging, promotion, delivery or shipping of the same, and all finished goods, whether or not the same is in transit or in the constructive, actual or exclusive possession of such Borrower or is held by others for such Borrower’s account, including, without limitation, all goods covered by purchase orders and contracts with suppliers and all goods billed and held by suppliers and all such property that may be in the possession or custody of any carriers, forwarding agents, truckers, warehousemen, vendors, selling agents or other Persons.

“Investment Property” means any “investment property,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“Letter of Credit Rights” means any “letter of credit rights,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest, including any right to payment under any letter of credit.

“License” means any Copyright License, Patent License, Trademark License or other license of rights or interests now held or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest and any renewals or extensions thereof.

“Lien” means any mortgage, deed of trust, pledge, hypothecation, assignment for security, security interest, encumbrance, levy, lien or charge of any kind, whether voluntarily incurred or arising by operation of law or otherwise, against any property, any conditional sale or other title retention agreement, any lease in the nature of a security interest, and the filing of any financing statement (other than a precautionary financing statement with respect to a lease that is not in the nature of a security interest) under the UCC or comparable law of any jurisdiction.

“Loan” means an extension of credit by Lender under this Agreement.

“Loan Documents” means, individually and collectively, this Loan and Security Agreement, each Supplement, each Note, the Intellectual Property Security Agreement, and any other security or pledge agreement(s), any Warrants issued by Parent (or its designee) in connection with this Agreement, and all other contracts, instruments, addenda and documents executed by any Borrower in connection with this Agreement or the extensions of credit which are the subject of this Agreement.

“Material Adverse Effect” or **“Material Adverse Change”** means, with respect to Parent and its Subsidiaries on a Consolidated basis, (a) a material adverse change in, or a material adverse effect upon, the operations, business, properties, or condition (financial or otherwise) of Parent and its Subsidiaries; (b) a material impairment of the ability of such Borrower to perform under any Loan Document; or (c) a material adverse effect upon the legality, validity, binding effect or enforceability against a Borrower of any Loan Document.

“Note” means a promissory note substantially in the form attached to the Supplement as Exhibit “A”, executed by Borrowers evidencing each Loan.

“Obligations” means with respect to each Borrower, all debts, obligations and liabilities of such Borrower to Lender currently existing or now or hereafter made, incurred or created under, pursuant to or in connection with this Agreement or any other Loan Document (other than any Warrants issued to either Lender or any of its affiliates or designees), whether voluntary or involuntary and however arising or evidenced, whether direct or acquired by Lender by assignment or succession, whether due or not due, absolute or contingent, liquidated or unliquidated, determined or undetermined, and whether such Borrower may be liable individually or jointly, or whether recovery upon such debt may be or become barred by any statute of limitations or otherwise unenforceable; and all renewals, extensions and modifications thereof; and all attorneys’ fees and costs incurred by Lender in connection with the collection and enforcement thereof as provided for in any Loan Document (other than any Warrants issued to either Lender or any of its affiliates or designees).

“Parent” means Bacterin International Holdings, Inc., a Delaware corporation.

“Patent License” means any written agreement granting any right with respect to any invention on which a Patent is in existence now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“Patents” means all of the following property now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest: (a) all letters patent of, or rights corresponding thereto in, the United States or any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto in, the United States or any other country, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country; (b) all reissues, continuations, continuations-in-part or extensions thereof; (c) all petty patents, divisionals, and patents of addition; and (d) all patents to be issued under any such applications.

“Permitted Lien” means:

(a) involuntary Liens which, in the aggregate, would not have a Material Adverse Effect and which in any event would not exceed, in the aggregate, the Threshold Amount;

(b) Liens for current taxes or other governmental or regulatory assessments which are not delinquent, or which are contested in good faith by the appropriate procedures and for which appropriate reserves are maintained;

(c) security interests on any property (including any accessions, additions, replacements or substitutions) held or acquired by a Borrower in the ordinary course of business securing Indebtedness incurred or assumed for the purpose of financing all or any part of the cost of acquiring such property; provided, that such Lien attaches solely to the property acquired with such Indebtedness and that the principal amount of such Indebtedness does not exceed one hundred percent (100%) of the cost of such property;

(d) Liens in favor of Lender;

(e) bankers’ liens, rights of setoff and similar Liens incurred on deposits made in the ordinary course of business as long as an account control agreement (or equivalent) for each account in which such deposits are held in a form acceptable to Lender has been executed and delivered to Lender;

(f) materialmen’s, mechanics’, repairmen’s, employees’ or other like Liens arising in the ordinary course of business and which are not delinquent for more than 45 days or are being contested in good faith by appropriate proceedings;

(g) any judgment, attachment or similar Lien, unless the judgment it secures has not been discharged or execution thereof effectively stayed and bonded against pending appeal within 30 days of the entry thereof;

(h) licenses or sublicenses of Intellectual Property in accordance with the terms of Section 6.5 hereof;

(i) Liens securing Subordinated Debt;

(j) Liens securing Indebtedness of Borrowers to Bank under the A/R Facility;

(k) Liens arising in connection with worker’s compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure statutory obligations (other than liens arising under ERISA or environmental liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds; all, in the ordinary course of a Borrower’s business;

- (l) Liens on Borrowers' deposits not to exceed \$50,000 in aggregate amount securing corporate credit cards;
- (m) Liens in favor of customs and revenue authorities arising as a matter of law, in the ordinary course of each Borrower's business, to secure payment of customs duties in connection with the importation of goods;
- (n) Liens on insurance proceeds securing the payment of financed insurance premiums if and to the extent a Borrower finances such premiums;
- (o) Lien on real property of any Borrower; and
- (p) Liens which have been approved by Lender in writing prior to the Closing Date, as shown on the Disclosure Letter hereto.

"Person" means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, public benefit corporation, other entity or government (whether federal, state, county, city, municipal, local, foreign, or otherwise, including any instrumentality, division, agency, body or department thereof).

"Proceeds" means "proceeds," as such term is defined in the UCC and, in any event, shall include, without limitation, (a) any and all Accounts, Chattel Paper, Instruments, cash or other forms of money or currency or other proceeds payable to a Borrower from time to time in respect of the Collateral, (b) any and all proceeds of any insurance, indemnity, warranty or guaranty payable to a Borrower from time to time with respect to any of the Collateral, (c) any and all payments (in any form whatsoever) made or due and payable to a Borrower from time to time in connection with any requisition, confiscation, condemnation, seizure or forfeiture of all or any part of the Collateral by any governmental authority (or any Person acting under color of governmental authority), (d) any claim of a Borrower against third parties (i) for past, present or future infringement of any Copyright, Patent or Patent License or (ii) for past, present or future infringement or dilution of any Trademark or Trademark License or for injury to the goodwill associated with any Trademark, Trademark registration or Trademark licensed under any Trademark License and (e) any and all other amounts from time to time paid or payable under or in connection with any of the Collateral.

"Receivables" means all of a Borrower's Accounts, Instruments, Documents, Chattel Paper, Supporting Obligations, and letters of credit and Letter of Credit Rights.

"Records" means all of a Borrower's computer programs, software, hardware, source codes and data processing information, all written documents, books, invoices, ledger sheets, financial information and statements, and all other writings concerning such Borrower's business.

"Related Person" means any Affiliate of a Borrower, or any officer, employee, director or equity security holder of such Borrower or any Affiliate.

"Rights to Payment" means all of a Borrower's accounts, instruments, contract rights, documents, chattel paper and all other rights to payment, including, without limitation, the Accounts, all negotiable certificates of deposit and all rights to payment under any Patent License, any Trademark License, or any commercial or standby letter of credit.

"Security Documents" means this Loan and Security Agreement, the Supplement hereto, the Intellectual Property Security Agreement, and any and all account control agreements, collateral assignments, chattel mortgages, financing statements, amendments to any of the foregoing and other documents from time to time executed or filed to create, perfect or maintain the perfection of Lender's Liens on the Collateral.

"Shares" means: (a) one hundred percent (100%) of the issued and outstanding capital stock, membership units or other securities owned or held of record by a Borrower in any domestic Subsidiary, and (b) 65% of the issued and outstanding capital stock, membership units or other securities entitled to vote owned or held of record by a Borrower in any Subsidiary that is a controlled foreign corporation (as defined in the Internal Revenue Code).

"Subordinated Debt" means Indebtedness (i) approved by Lender; and (ii) where the holder's right to payment of such Indebtedness, the priority of any Lien securing the same, and the rights of the holder thereof to enforce remedies against the Borrower following default have been made subordinate to the Liens of Lender and to the prior payment to Lender of the Obligations, pursuant to a written subordination agreement approved by Lender in its sole but reasonable discretion.

“Subsidiary.” means any Person a majority of the equity ownership or voting stock of which is at the time owned by a Borrower.

“Supplement” means that certain supplement to the Loan and Security Agreement, as the same may be amended or restated from time to time, and any other supplements entered into between Borrowers and Lender, as the same may be amended or restated from time to time.

“Supporting Obligations” means any “supporting obligations,” as such term is defined in the UCC, now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“Termination Date” has the meaning specified in the Supplement.

“Threshold Amount” has the meaning specified in the Supplement.

“Trademark License” means any written agreement granting any right to use any Trademark or Trademark registration now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest.

“Trademarks” means all of the following property now owned or hereafter acquired by Borrowers or in which Borrowers now holds or hereafter acquires any interest: (a) all trademarks, tradenames, corporate names, business names, trade styles, service marks, logos, other source or business identifiers, prints and labels on which any of the foregoing have appeared or appear, designs and general intangibles of like nature, now existing or hereafter adopted or acquired, all registrations and recordings thereof, and any applications in connection therewith, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country or any political subdivision thereof and (b) reissues, extensions or renewals thereof.

“UCC” means the Uniform Commercial Code as the same may, from time to time, be in effect in the State of California; provided, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection or priority of, or remedies with respect to, Lender’s Lien on any Collateral is governed by the Uniform Commercial Code as enacted and in effect in a jurisdiction other than the State of California, the term “UCC” shall mean the Uniform Commercial Code as enacted and in effect in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority or remedies and for purposes of definitions related to such provisions. Unless otherwise defined herein, terms that are defined in the UCC and used herein shall have the meanings given to them in the UCC.

11.2 Construction of Collateral Definitions. In the definition of Collateral and in all terms defined directly or indirectly within the definition of Collateral, all references to “Borrower” or “Borrower’s” shall be interpreted as referring to “any Borrower” or to “each Borrower,” as the context may require for purposes of any Loan Document, including any security agreement, charge registration or financing statement executed by any Borrower from time to time pursuant to this Agreement.

[Signature page follows]

[Signature page to Loan and Security Agreement]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

BORROWERS:

BACTERIN INTERNATIONAL HOLDINGS, INC.

By: /s/ John Gandolfo
Name: John Gandolfo
Title: CFO

BACTERIN INTERNATIONAL, INC.

By: /s/ John Gandolfo
Name: John Gandolfo
Title: CFO

LENDER:

VENTURE LENDING & LEASING V, INC.

By: /s/ Maurice Werdegar
Name: Maurice Werdegar
Title: President and CEO

LENDER:

VENTURE LENDING & LEASING VI, INC.

By: /s/ Maurice Werdegar
Name: Maurice Werdegar
Title: President and CEO

SUPPLEMENT
to the
Loan and Security Agreement
dated as of November 17, 2010
among
Bacterin International Holdings, Inc., and
Bacterin International, Inc.
(each individually a “Borrower” and collectively, “Borrowers”)
and
Venture Lending & Leasing V, Inc. (“VLL5”)
and
Venture Lending & Leasing VI, Inc. (“VLL6”)
(each of VLL5 and VLL6, as “Lender”)

This is a Supplement identified in the document entitled Loan and Security Agreement dated as of November 17, 2010 (as the same may be amended, restated, supplemented and modified from time to time, the **“Loan and Security Agreement”**), by and among Borrowers and Lender. All capitalized terms used in this Supplement and not otherwise defined in this Supplement have the meanings ascribed to them in Article 10 of the Loan and Security Agreement, which is incorporated in its entirety into this Supplement. In the event of any inconsistency between the provisions of the Loan and Security Agreement and this Supplement, this Supplement is controlling.

The parties are entering into this single Supplement to the Loan and Security Agreement for convenience, and this Supplement is and shall be interpreted for all purposes as separate and distinct agreements between Borrowers and VLL5, on the one hand, and Borrowers and VLL6, on the other hand, and nothing in this Supplement shall be deemed a joint venture, partnership or other association between VLL5 and VLL6. Each reference in this Supplement to “Lender” shall mean and refer to each of VLL5 and VLL6, singly and independent of one another. Without limiting the generality of the foregoing, the Commitment, covenants and other obligations of “Lender” under the Loan and Security Agreement, as supplemented hereby, are several and not joint obligations of VLL5 and VLL6, and all rights and remedies of “Lender” under the Loan and Security Agreement, as supplemented hereby, may be exercised by VLL5 and/or VLL6 independently of one another.

In addition to the provisions of the Loan and Security Agreement, the parties agree as follows:

Part 1. - Additional Definitions:

“Additional Reserve” means, as the context may require, the VLL5 Additional Reserve or the VLL6 Additional Reserve. Each Lender’s Additional Reserve is several and not joint with the Additional Reserve of the other Lender.

“A/R Facility” is defined in Section 3 of Part 2 of this Supplement.

“Bank” is defined in Section 3 of Part 2 of this Supplement.

“Commitment” means, as the context may require, the VLL5 Commitment or the VLL6 Commitment. Each Lender’s Commitment is several and not joint with the Commitment of the other Lender.

“Designated Rate”: The Designated Rate for each Growth Capital Loan shall be a fixed rate of interest per annum equal to the Prime Rate as published on the Business Day on which Lender prepares the Note for such Loan, plus 6.5%, provided, that in no event shall the Designated Rate for a Growth Capital Loan be less than 9.75%.

“EBITDA” means, with respect to Parent and its Subsidiaries on a Consolidated basis for any period, net income determined in accordance with GAAP (determined for purposes hereof without giving effect to extraordinary, unusual or nonrecurring gains or losses) for such period *plus* the sum of all amounts deducted in arriving at such net income amount in respect of (i) interest expense, (ii) federal, state and local income taxes, (iii) depreciation of fixed assets and amortization of intangible assets, (iv) non-cash charges for goodwill write offs and write downs, (v) non-cash charges for employee compensation plans, and (vi) other non-cash items reducing net income, *minus* non-cash items increasing net income for such period.

“Final Payment”: Each Growth Capital Loan shall have a Final Payment equal to 4.174% of the original principal amount of such Loan.

“Growth Capital Loan” means any Loan requested by Borrowers and funded by Lender under its Commitment for general corporate purposes of Borrowers.

“Interest-Only Rate”: The Interest-only Rate for each Growth Capital Loan shall be a fixed rate of interest per annum equal to 12.50%.

“Loan” or **“Loans”** mean, as the context may require, individually a Growth Capital Loan, and collectively, the Growth Capital Loans.

“Prime Rate” means the “prime rate” of interest, as published from time to time by The Wall Street Journal in the “Money Rates” section of its Western Edition newspaper.

“Termination Date” means the earlier of: (i) the date Lender may terminate making Growth Capital Loans or extending other credit pursuant to the rights of Lender under Article 7 of the Loan and Security Agreement; or (ii)(A) *with respect to the First Tranche of the Commitment*, November 17, 2010; and (B) *with respect to the Second Tranche of the Commitment*, April 30, 2011.

“Threshold Amount”: One Hundred Thousand Dollars (\$100,000).

“VLL5 Additional Reserve” means VLL5’s agreement to reserve from its capital available for funding loan commitments to third party borrowers an amount equal to \$1,500,000 for, subject to Part 2, Section 9 hereof, the purposes of committing at a future date to make, and making Loans to Borrowers pursuant to the Loan and Security Agreement and any other Loan Documents executed and delivered in connection therewith.

“VLL5 Commitment”: Subject to the terms and conditions set forth in the Loan and Security Agreement and this Supplement, VLL5 commits to make Growth Capital Loans to Borrowers in an original principal amount not to exceed of Two Million Five Hundred Thousand Dollars (\$2,500,000). The VLL5 Commitment shall be divided into two (2) equal tranches in the amount of One Million Two Hundred Fifty Thousand Dollars (\$1,250,000) each, which shall be referred to herein as the **“First Tranche”** and the **“Second Tranche”** of the VLL5 Commitment, respectively.

“VLL6 Additional Reserve” means VLL6’s agreement to reserve from its capital available for funding loan commitments to third party borrowers an amount equal to \$1,500,000 for, subject to Part 2, Section 9 hereof, the purposes of committing at a future date to make, and making Loans to Borrowers pursuant to the Loan and Security Agreement and any other Loan Documents executed and delivered in connection therewith.

“VLL6 Commitment”: Subject to the terms and conditions set forth in the Loan and Security Agreement and this Supplement, VLL6 commits to make Growth Capital Loans to Borrowers in an original principal amount not to exceed of Two Million Five Hundred Thousand Dollars (\$2,500,000). The VLL6 Commitment shall be divided into two (2) equal tranches in the amount of One Million Two Hundred Fifty Thousand Dollars (\$1,250,000) each, which shall be referred to herein as the **“First Tranche”** and the **“Second Tranche”** of the VLL6 Commitment, respectively.

Part 2. - Additional Covenants and Conditions:

1. Commitment; Conditions Precedent with respect to First Tranche and Second Tranche; Funding and Repayment of Growth Capital Loans.

(a) Conditions Precedent Regarding First Tranche. In addition to the other conditions precedent specified in Articles 2 and 4 of the Loan and Security Agreement and this Supplement, Lender’s obligation to fund the Growth Capital Loan under the First Tranche of Lender’s Commitment is subject to the receipt by Lender of evidence satisfactory to it, as determined by Lender in its reasonable judgment, that as of the date of the Borrowing Request for such Loan: (i) either (A) Borrowers have received a payoff letter, in form and substance satisfactory to Lender, from the City of Belgrade indicating the total amount of Borrowers’ Indebtedness to the City of Belgrade as of the funding date of the Loan, a portion of the proceeds of which will be used to repay in full all of such Indebtedness, or (B) Borrowers’ Indebtedness to the City of Belgrade has been repaid in full; and (ii) either (A) Borrowers have received a payoff letter, in form and substance satisfactory to Lender, from Valley Bank indicating the total amount of Bacterin International Inc.’s Indebtedness to Valley Bank as of the funding date of the Loan pursuant to Loan # 31057715 (the **“Valley Bank Loan”**), a portion of the proceeds of which will be used to repay in full all of such Indebtedness, or (B) Borrowers’ Indebtedness to Valley Bank pursuant to the Valley Bank Loan has been repaid in full and Valley Bank’s Liens on Bacterin International Inc.’s personal property have been terminated and released; and (iii) either (A) Borrowers have received a payoff letter, in form and substance satisfactory to Lender, from the Hamilton Group (Delaware), Inc. (**“Hamilton Group”**) indicating the total amount of Borrowers’ Indebtedness to Hamilton Group as of the funding date of the Loan, a portion of the proceeds of which will be used to repay in full all of such Indebtedness, or (B) Borrowers’ Indebtedness to the Hamilton Group has been repaid in full; and (iv) either (A) Borrowers have received evidence, in form and substance satisfactory to Lender from each shareholder to which Borrowers are indebted as of the Closing Date, indicating the total amount of Borrowers’ Indebtedness to such shareholders as of the funding date of the Loan, a portion of the proceeds of which will be used to repay in full all of such Indebtedness, or (B) Borrowers’ Indebtedness to each such shareholder has been repaid in full. Borrowers represent that the shareholders do not have Liens on either Borrower’s personal property.

(b) Additional Condition Precedent Regarding Second Tranche. In addition to the satisfaction of all the other conditions precedent specified in the Loan and Security Agreement and this Supplement, Lender’s obligation to fund the Growth Capital Loan under the Second Tranche of Lender’s Commitment is subject to receipt by Lender of evidence satisfactory to it, as determined by Lender in its reasonable judgment, that Parent and its Subsidiaries on a Consolidated basis have achieved at least ninety percent (90%) of their revenue, EBITDA and cash plan for the period commencing on September 1, 2010 and ending on March 30, 2011, as such figures are set forth in the plan dated September 23, 2010.

(c) Funding of Growth Capital Loans. Subject to the terms and conditions of the Loan and Security Agreement and this Supplement (including Section 1(a) above with respect to the First Tranche and Section 1(b) above with respect to the Second Tranche), Lender agrees to make Growth Capital Loans to Borrowers from time to time from the Closing Date up to and including the applicable Termination Date in an aggregate original principal amount up to but not exceeding the then unfunded portion of its Commitment.

(d) **Repayment of Growth Capital Loans.** Principal of and interest on each Growth Capital Loan shall be payable as set forth in a Note evidencing such Loan (substantially in the form attached hereto as Exhibit "A"), which Note shall provide substantially as follows: principal and interest at the Designated Rate shall be fully amortized over a period of thirty (30) months in equal, monthly installments (the "**Amortization Period**"), commencing after an initial 6-month period of interest-only, monthly payments at the Interest-Only Rate. In particular, on the Borrowing Date applicable to such Growth Capital Loan, Borrowers shall pay to Lender (i) *if the Borrowing Date is not the first day of the month*, interim interest only at a rate per month equal to 1.083%, in advance, on the outstanding principal balance of the Growth Capital Loan for the period from the Borrowing Date through the last day of the calendar month in which such Borrowing Date occurs, and (ii) the first interest-only installment payment at the Interest-Only Rate, in advance, on the outstanding principal balance of the Note evidencing such Loan for the ensuing month. On the first day of the second full month after the Borrowing Date and continuing on the first day of each of the third, fourth, fifth and sixth months thereafter, Borrowers shall pay interest at the Interest-Only Rate, in advance, on the outstanding principal balance of the Loan evidenced by such Note for the ensuing month. Commencing on the first day of the seventh full month after the Borrowing Date, and continuing on the first day of each consecutive calendar month thereafter, principal and interest at the Designated Rate shall be payable, in advance, in thirty (30) equal consecutive monthly installments in an amount sufficient to fully amortize the Growth Capital Loan evidenced by such Note. The Final Payment on such Growth Capital Loan shall be due and payable on the same date that the thirtieth (30th) payment is due.

2. Voluntary Prepayments.

(a) **Prepayment Generally.** Except as set forth in Section 2(b), no Growth Capital Loan may be voluntarily prepaid except as provided in this Section 2(a). Borrowers may voluntarily prepay all, but not less than all, Growth Capital Loans in whole, but not in part, at any time by tendering to Lender cash payment in respect of such Loans in an amount equal to the sum of: (i) the accrued and unpaid interest on such Loans as of the date of prepayment; and (ii) an amount equal to the total amount of all scheduled but unpaid payments (including Final Payments) that would have accrued and been payable from the date of prepayment through the stated date of maturity of the Loans had they remained outstanding and been paid in accordance with the terms of the related Notes.

(b) **Prepayment after Eighteen Amortization Payments.** Notwithstanding anything to the contrary in Section 2(a), commencing at any time after Borrowers have made a minimum of eighteen (18) regularly scheduled amortization payments of principal and interest at the Designated Rate on each Loan during the Amortization Period for such Loan, and so long as no Event of Default has occurred and is continuing, Borrowers may voluntarily prepay all, but not less than all, Loans in whole, but not in part, by tendering to Lender cash payment in respect of such Loans in an amount (as determined by Lender) equal to the sum of: (i) all accrued and unpaid interest on such Loans as of the date of prepayment; (ii) all outstanding principal balances of such Loans as of the date of prepayment; and (iii) an amount equal to the product of (A) 0.80 and (B) the undiscounted, aggregate amount of the interest that would have accrued and been payable after the date of prepayment through the latest repayment date set forth in the Notes evidencing the Loans had they remained outstanding and been paid in accordance with the terms of the related Notes. For the avoidance of doubt, payments of interest-only at the Interest-Only Rate on a Loan during the applicable interest-only period for such Loan shall not count towards the minimum of the eighteen (18) amortization payments required by the first sentence of this Section 2(b).

3. **Subordination of Lien Priority for Accounts Receivables-Based Bank Financing.** Subject to the conditions precedent in the following *proviso*, upon written notice of Borrowers to Lender, Lender agrees that (A) it will subordinate the priority of the Liens granted to Lender pursuant to the Security Documents as to that portion of the Collateral consisting of Borrowers' accounts receivable and related assets (as may be agreed to by Lender) and cash which constitutes the proceeds thereof, and (B) it will permit a lien on that portion of the Collateral that is not described in clause (A) that is subordinate to the Liens granted to Lender, which Liens shall be granted concurrently with the closing of a loan agreement between Borrowers and a bank or commercial finance lender ("**Bank**") which provides loans to Borrowers in an aggregate outstanding principal amount not to exceed \$3,000,000 (the "**Cap**") based upon a formula of eligible accounts receivable (the "**A/R Facility**"), *provided* that as a condition precedent thereto: (i) no Default or Event of Default shall have occurred and be continuing; and (ii) Lender, Bank and Borrowers shall have entered into an intercreditor agreement in form and substance reasonably acceptable to Lender, setting forth the rights and obligations of the parties with respect to their respective Liens on Collateral. Upon: (a) Parent and its Subsidiaries on a Consolidated basis achieving cumulative EBITDA during a period of two consecutive quarters of at least \$4,000,000 in the aggregate; and (b) Borrowers' management having certified to Lender that it reasonably expects that EBITDA will be positive in future quarters, the Cap shall be eliminated and of no further force and effect.

4. Issuance of Warrants.

(a) **VLL5 Warrant.** As additional consideration for the making of its Commitment, VLL5 has earned and is entitled to receive immediately upon the execution of the Loan and Security Agreement and this Supplement a warrant instrument issued by Parent (the “**VLL5 Warrant**”), exercisable for a number of fully paid and nonassessable shares of Parent’s common stock of the series set forth therein, at an exercise price per share set forth therein.

(b) **VLL6 Warrant.** As additional consideration for the making of its Commitment, VLL6 has earned and is entitled to receive immediately upon the execution of the Loan and Security Agreement and this Supplement a warrant instrument issued by Parent (the “**VLL6 Warrant**” and together with the VLL5 Warrant, the “**Warrants**”), exercisable for a number of fully paid and nonassessable shares of Parent’s common stock of the series set forth therein, at an exercise price per share set forth therein.

(c) **General.** The Warrants shall be substantially in the form of Exhibit “D” attached hereto. Borrowers acknowledge that VLL5 has assigned its rights to receive the VLL5 Warrant to its parent, Venture Lending & Leasing V, LLC, and that VLL6 has assigned its rights to receive the VLL6 Warrant to its parent, Venture Lending & Leasing VI, LLC. In connection therewith, Parent shall issue the Warrants directly to Venture Lending & Leasing V, LLC, and Venture Lending & Leasing VI, LLC, as applicable. Upon request of Borrowers, Lender shall furnish to Borrowers a copy of the agreement in which each Lender assigned its rights to receive its Warrants to its parent.

5. Completion of Due Diligence; Payment and Disposition of Commitment Fee. As an additional condition precedent under Section 4.1 of the Loan and Security Agreement, Lender shall have completed to its satisfaction its due diligence review of Borrowers’ business and financial condition and prospects, and Lender’s investment committee shall have approved its Commitment. If this condition is not satisfied, the \$50,000 commitment fee (the “**Commitment Fee**”) previously paid by Borrowers shall be refunded. VLL5 agrees that with respect to each Growth Capital Loan advanced under its Commitment, on the Borrowing Date applicable to such Loan, VLL5 shall credit against the payments due from Borrowers on such date in respect of such Loan an amount equal to the product of \$25,000 and a fraction the numerator of which is the principal amount of such Loan and the denominator of which is \$2,500,000, provided that the aggregate amount of such credits made by VLL5 shall not exceed \$25,000. VLL6 agrees that with respect to each Growth Capital Loan advanced under its Commitment, on the Borrowing Date applicable to such Loan, VLL6 shall credit against the payments due from Borrowers on such date in respect of such Loan an amount equal to the product of \$25,000 and a fraction the numerator of which is the principal amount of such Loan and the denominator of which is \$2,500,000, provided that the aggregate amount of such credits made by VLL6 shall not exceed \$25,000. Except as set forth in this Section 5, the Commitment Fee is not refundable.

6. Documentation Fee Payment. Pursuant to Section 9.8(a) of the Loan and Security Agreement, Borrowers shall pay Lender, on demand, Lender’s reasonable documented costs incurred in documenting this transaction and perfecting Lender’s Liens on the Collateral, which amount shall constitute payment for the total amount of Lender’s actual legal fees, costs and expenses incurred in connection with the preparation and negotiation of the Loan Documents, not to exceed Fifty Thousand Dollars (\$50,000) in aggregate amount, provided that there are no more than two rounds of comments to Lender’s standard documents.

7. Primary Operating Account and Wire Transfer Instructions. Borrowers’ primary operating account and wire transfer instructions are set forth in Part 2.7 of the Disclosure Letter.

8. Debits to Account for ACH Transfers. For purposes of Sections 2.2 and 5.10 of the Loan and Security Agreement, the Primary Operating Account shall be the bank account set forth in Part 2.7 of the Disclosure Letter. Borrowers hereby agree that Loans will be advanced to the account specified above and regularly scheduled payments of principal, interest and Final Payments will be automatically debited from the same account.

9. Additional Conditions Precedent Regarding Additional Reserve. Notwithstanding anything to the contrary contained herein or in the other Loan Documents, Lender's obligation to convert its Additional Reserve into a binding commitment to make Loans to Borrowers pursuant to the terms of the Loan and Security Agreement, this Supplement and any other Loan Documents is subject to Borrowers and Lender having mutually agreed, in writing, to make the Additional Reserve into a binding commitment. The parties currently contemplate that the "Termination Date" for such future binding commitment, if any, will be December 31, 2011, the amount of any such binding future commitment shall not exceed the lesser of \$1,500,000 (per Lender) and 25% of the proceeds Parent receives from the sale of shares of Parent's equity securities in the next equity financing closed after the date hereof, and that the other terms of any such commitment shall be mutually determined at a later date by Lender and Borrowers. Lender shall not receive any commitment fee and additional warrant coverage in connection with the Additional Reserve until such time, if any, that it is converted into a binding commitment.

10. Acknowledgment Regarding City of Belgrade Liens. Each Borrower acknowledges that, as of the Closing Date, the City of Belgrade has filed three liens in the State of Montana against Bacterin, Inc.'s assets (Filing No. 97518343, 71907317, and 79967159, as amended) (the "**City of Belgrade Liens**"). As of the Closing Date, Borrowers are unable to terminate or cause the City of Belgrade Liens to be terminated. In order to facilitate the closing of the transactions contemplated by the Loan and Security Agreement and subject to the last sentence of this Section 10, Lender hereby grants a waiver of the requirements of Section 6.2 of the Loan and Security Agreement with respect to the City of Belgrade Liens for 30 days following the Closing Date. The foregoing waiver applies only to the specific instance described, and is not a waiver of any subsequent application of the same provisions of the Loan and Security Agreement, nor is it a waiver of any other provision of the Loan and Security Agreement. Borrowers covenant and agree that no later than 30 days following the Closing Date, they shall terminate or cause such City of Belgrade Liens to be terminated. Borrowers agree that any failure to terminate or cause the City of Belgrade Liens to be terminated in accordance with the terms of this Section 10 shall constitute an Event of Default under Section 7.1 of the Loan and Security Agreement notwithstanding anything to the contrary in the Loan and Security Agreement.

11. Acknowledgment Regarding Hamilton Group Liens. Each Borrower acknowledges that, as of the Closing Date, the Hamilton Group maintains two liens against the assets of Bacterin International, Inc. in the State of Nevada (File No. 2008021742-5 filed July 10, 2009, as amended by File No. 2010001111-9 filed January 12, 2010) and the State of Montana (File No. 97133033 filed July 11, 2008, as amended by File No. 577346759 filed January 26, 2010), and a lien against Bacterin, Inc.'s assets in the State of Montana (File No. 97133033 filed July 11, 2008, as amended by File No. 577346759 filed January 26, 2010) (collectively, the "**Hamilton Group Liens**"). As of the Closing Date, Borrowers are unable to terminate or cause the Hamilton Group Liens to be terminated. In order to facilitate the closing of the transactions contemplated by the Loan and Security Agreement and subject to the last sentence of this Section 11, Lender hereby grants a waiver of the requirements of Section 6.2 of the Loan and Security Agreement with respect to the Hamilton Group Liens for 15 days following the Closing Date. The foregoing waiver applies only to the specific instance described, and is not a waiver of any subsequent application of the same provisions of the Loan and Security Agreement, nor is it a waiver of any other provision of the Loan and Security Agreement. Borrowers covenant and agree that no later than 15 days following the Closing Date, they shall terminate or cause such Hamilton Group Liens to be terminated. Borrowers agree that any failure to terminate or cause the Hamilton Group Liens to be terminated in accordance with the terms of this Section 11 shall constitute an Event of Default under Section 7.1 of the Loan and Security Agreement notwithstanding anything to the contrary in the Loan and Security Agreement.

12. Acknowledgment Regarding Valley Bank Account. As of the Closing Date, Borrowers are unable to deliver to Lender account control agreement(s) (“**Control Agreements**”) with respect to the deposit and securities accounts they maintain at Valley Bank (the “**Valley Bank Accounts**”) contemplated by Sections 4.1(f), 4.2(e) and 6.11 of the Loan and Security Agreement. In order to facilitate the closing of the transactions contemplated by the Loan and Security Agreement and subject to the last sentence of this Section 12, Lender hereby grants a waiver of the requirements of Section 4.1(f), 4.2(e) and Section 6.11 of the Loan and Security Agreement with respect to the Valley Bank Accounts. The foregoing waiver applies only to the specific instance described, and is not a waiver of any subsequent application of the same provisions of the Loan and Security Agreement, nor is it a waiver of any other provision of the Loan and Security Agreement. In consideration of the foregoing waiver, Borrowers agree that no later than the date which is 30 days following the Closing Date, Borrowers shall either: (a) close such Valley Bank Account and transfer all funds on deposit at such Valley Bank Account to the Bridge Bank Account specified in Part 2.7 of the Disclosure Letter; or (b) deliver or cause to be delivered to Lender the Control Agreements for the Valley Bank Accounts. Borrowers agree that any failure to deliver the Control Agreements in accordance with the terms of this Section 12 shall constitute an Event of Default under Section 7.1 of the Loan and Security Agreement notwithstanding anything to the contrary in the Loan and Security Agreement.

Part 3. - Additional Representations:

Each Borrower, jointly and severally, represents and warrants that as of the Closing Date and each Borrowing Date the statements set forth in Part 3 of the Disclosure Letter are true and correct as of the date hereof.

Part 4. - Additional Loan Documents:

Form of Note	Exhibit “A”
Form of Borrowing Request	Exhibit “B”
Form of Compliance Certificate	Exhibit “C”
Form of Warrants	Exhibit “D”
Form of Landlord Waiver	Exhibit “E”
Form of Legal Opinion	Exhibit “F”
Form of Intellectual Property Security Agreement	Exhibit “G”

Remainder of this page intentionally left blank; signature page follows

IN WITNESS WHEREOF, the parties have executed this Supplement as of the date first above written.

BORROWERS:

BACTERIN INTERNATIONAL HOLDINGS, INC.

By: /s/ John Gandolfo
Name: John Gandolfo
Title: CFO

Address for Notices:

600 Cruiser Lane
Belgrade, MT 59714
Attn: J. Gandolfo
Fax # 406-388-1354
Phone # 406-388-0408

BACTERIN INTERNATIONAL, INC.

By: /s/ John Gandolfo
Name: John Gandolfo
Title: CFO

Address for Notices:

600 Cruiser Lane
Belgrade, MT 59714
Attn: J. Gandolfo
Fax # 406-388-1354
Phone # 406-388-0408

LENDER:

VENTURE LENDING & LEASING V, INC.

By: /s/ Maurice Werdegar
Name: Maurice Werdegar
Title: President and CEO

Address for Notices:

2010 North First Street, Suite 310
San Jose, California 95131
Attn: Chief Financial Officer
Fax # 408-436-8625
Phone # 408-436-8577

VENTURE LENDING & LEASING VI, INC.

By: /s/ Maurice Werdegar
Name: Maurice Werdegar
Title: President and CEO

Address for Notices:

2010 North First Street, Suite 310
San Jose, California 95131
Attn: Chief Financial Officer
Fax # 408-436-8625
Phone # 408-436-8577

EXHIBIT "A"

FORM OF PROMISSORY NOTE

[Note No. X-XXX]

\$ _____

_____, 201_____
San Jose, California

The undersigned ("Borrowers"), jointly and severally, promise to pay to the order of VENTURE LENDING & LEASING [V/VI], INC., a Maryland corporation ("Lender"), at its office at 2010 North First Street, Suite 310, San Jose, California 95131, or at such other place as Lender may designate in writing, in lawful money of the United States of America, the principal sum of _____ Dollars (\$ _____), with interest thereon from the date hereof until maturity, whether scheduled or accelerated, at a fixed rate per annum equal to **[the Prime Rate as published on the Business Day on which Lender prepares this Note plus 6.50%, but in no event less than 9.75%]** (the "Designated Rate"), except as otherwise provided herein, according to the payment schedule described herein, and a Final Payment in the sum of **[4.174% of face amount of this Note]** Dollars (\$ _____) payable on the date set forth below.

This Note is one of the Notes referred to in, and is entitled to all the benefits of, a Loan and Security Agreement dated as of November 17, 2010, between Borrowers and Lender (as the same has been and may be amended, restated and supplemented from time to time, the "Loan Agreement"). Each capitalized term not otherwise defined herein shall have the meaning set forth in the Loan Agreement. The Loan Agreement contains provisions for the acceleration of the maturity of this Note upon the happening of certain stated events.

Principal of and interest on this Note shall be payable as follows:

On the Borrowing Date, Borrowers shall pay **[(i) if the Borrowing Date is not the first day of the month: interest only at a fixed rate per month equal to 1.083%, in advance, on the outstanding principal balance of this Note for the period from the Borrowing Date through [the last day of the same month]; and (ii)]** interest only at a rate per annum equal to 12.50% (the "Interest-Only Rate"), in advance, on the outstanding principal balance of this Note in the amount of \$ _____ for the month of **[date of first regular interest only installment]**.

Commencing on **[the first day of the second full month after the Borrowing Date]**, and continuing on the first day of each of the third, fourth, fifth and sixth full months thereafter, Borrowers shall make payments, in advance, of interest only at the Interest-Only Rate on the outstanding principal balance of this Note in the amount of \$ _____ each.

Commencing on the first day of the seventh full month after the Borrowing Date, and continuing on the first day of each consecutive month thereafter, principal and interest at the Designated Rate shall be payable, in advance, in thirty (30) equal consecutive installments of _____ Dollars (\$ _____) each. The Final Payment and any unpaid expenses, fees, interest and principal amount shall be due and payable on **[same date as 30th payment is due]**

This Note may be voluntarily prepaid only as permitted under Section 2 of Part 2 of the Supplement to the Loan Agreement.

Any unpaid payments of principal or interest on this Note shall bear interest from their respective maturities, whether scheduled or accelerated, at a rate per annum equal to the Default Rate. Borrowers shall pay such interest on demand.

Interest, charges and fees shall be calculated for actual days elapsed on the basis of a 360-day year, which results in higher interest, charge or fee payments than if a 365-day year were used. In no event shall Borrowers be obligated to pay interest, charges or fees at a rate in excess of the highest rate permitted by applicable law from time to time in effect.

If Borrowers are late in making any payment under this Note by more than five (5) days, Borrowers agree to pay a "late charge" of five percent (5%) of the installment due, but not less than fifty dollars (\$50.00) for any one such delinquent payment. This late charge may be charged by Lender for the purpose of defraying the expenses incidental to the handling of such delinquent amounts. Borrowers acknowledge that such late charge represents a reasonable sum considering all of the circumstances existing on the date of this Note and represents a fair and reasonable estimate of the costs that will be sustained by Lender due to the failure of Borrowers to make timely payments. Borrowers further agree that proof of actual damages would be costly and inconvenient. Such late charge shall be paid without prejudice to the right of Lender to collect any other amounts provided to be paid or to declare a default under this Note or any of the other Loan Documents or from exercising any other rights and remedies of Lender.

This Note shall be governed by, and construed in accordance with, the laws of the State of California, excluding those laws that direct the application of the laws of another jurisdiction.

BACTERIN INTERNATIONAL HOLDINGS, INC.

By: _____
Name: _____
Its: _____

BACTERIN INTERNATIONAL, INC.

By: _____
Name: _____
Its: _____

EXHIBIT "B"

FORM OF BORROWING REQUEST

[Date]

Venture Lending & Leasing [V/VI], Inc.
2010 North First Street, Suite 310
San Jose, CA 95131

Re: **Bacterin International Holdings, Inc.**

Ladies and Gentlemen:

Reference is made to the Loan and Security Agreement dated as of November 17, 2010 (as the same has been and may be amended, restated and supplemented from time to time, the "Loan Agreement", the capitalized terms used herein as defined therein), between Venture Lending & Leasing [V/VI], Inc. ("VLL") and Bacterin International Holdings, Inc., and Bacterin International, Inc. (the "Borrowers").

The undersigned is an authorized officer of each of the Borrowers, and hereby requests on behalf of the Borrowers a Loan under the Loan Agreement, and in that connection certifies as follows:

1. The amount of the proposed Loan is _____ and ___/100 Dollars (\$_____). The Borrowing Date of the proposed Loan is _____, 201_____.
2. As of this date, no Default or Event of Default has occurred and is continuing, or will result from the making of the proposed Loan, the representations and warranties of the Borrowers contained in Article 3 of the Loan Agreement and Part 3 of the Supplement are true and correct in all material respects, and the applicable conditions precedent described in Article 4 of the Loan Agreement and Part 2 of the Supplement have been met.
3. No event that has had or could reasonably be expected to have a Material Adverse Change has occurred.
4. Parent's most recent financial projections or business plan dated _____, as approved by such Parent's Board of Directors on _____, is enclosed herewith in the event such financial projections or business plan have not been previously provided to VLL.

The Borrowers shall notify you promptly before the funding of the Loan if any of the matters to which I have certified above shall not be true and correct on the Borrowing Date.

Very truly yours,

BACTERIN INTERNATIONAL HOLDINGS, INC.

By: _____
 Name: _____
 Title:* _____

* Must be executed by Parent's Chief Financial Officer or other executive officer.

BACTERIN INTERNATIONAL, INC.

By: _____
Name: _____
Title: _____

* Must be executed by Borrower's Chief Financial Officer or other executive officer.

EXHIBIT "C"

FORM OF COMPLIANCE CERTIFICATE

Venture Lending & Leasing V, Inc.
Venture Lending & Leasing VI, Inc.
2010 North First Street, Suite 310
San Jose, CA 95131

Re: Bacterin International Holdings, Inc.

Ladies and Gentlemen:

Reference is made to the Loan and Security Agreement dated as of November 17, 2010 (as the same has been and may be amended, restated, modified and supplemented from time to time, the "Loan Agreement", the capitalized terms used herein as defined therein), between Bacterin International Holdings, Inc. (the "Borrowers") and each of Venture Lending & Leasing V, Inc. and Venture Lending & Leasing VI, Inc. (each, "Lender").

The undersigned authorized representative of the Borrowers hereby certify that in accordance with the terms and conditions of the Loan Agreement, (i) no Default or Event of Default has occurred and is continuing, except as noted below, and (ii) the Borrowers are in complete compliance for the financial reporting period ending _____ with all required financial reporting under the Loan Agreement, except as noted below. Attached herewith are the required documents supporting the foregoing certification. The undersigned further certifies that the accompanying financial statements have been prepared in accordance with the Borrowers' past practices applied on a consistent basis throughout the periods indicated. The financial statements fairly present in all material respects in accordance with GAAP the financial condition and operating results of the Parent and its subsidiaries as of the dates, and for the periods, indicated therein, excluding footnotes and subject to normal year-end audit adjustments (in the case of interim monthly financial statements), except as explained below.

Please provide the following requested information and indicate compliance status by circling Yes/No under "Complies":

Table with 3 columns: REPORTING REQUIREMENT, REQUIRED, and COMPLIES. Rows include Monthly Financial Statements, Operating Budgets/Updated Capitalization Tables, Audited, Annual Financial Statements, Date of most recent Board-approved budget/plan, Date of most recent capitalization table, and Any Patents, Trademarks and Copyrights applied.

Trademark Office or U.S. Copyright Office
during the quarter ending _____? YES/NO
If YES, please list by application/registration number and title

Date of Last Round Raised by Parent: _____
Has there been any new financing since the last Compliance Certificate submitted? YES/NO
Please complete information below each time this Compliance Certificate is furnished to Lender

Date Closed: _____ Per Share Price: \$ _____
Amount Raised: _____

Any stock splits since date of last report? YES/NO
If YES, please provide any information on stock splits which would affect valuation:

Any dividends since date of last report? YES/NO
If YES, please provide any information on dividends which would affect valuation:

Any unusual terms? (ie. Anti-dilution, multiple preference, etc.) YES/NO
If YES, please explain:

AGREEMENTS WITH PERSONS IN POSSESSION OF TANGIBLE COLLATERAL

Pursuant to Section 5.9(e) of the Loan Agreement, the Borrowers represent and warrant that: (i) as of the date hereof, tangible Collateral is located at the addresses set forth below; and (ii) a Waiver has been executed and delivered to Lender with respect to each such location at which the value of the Collateral located there is greater than \$25,000 [Note: If the Borrowers have located Collateral at any new location since the date of the last Compliance Certificate, please so indicate].

	<u>Location of Collateral</u>	<u>Value of Collateral at such Locations</u>	<u>Waiver In place?</u>	<u>Complies?</u>	<u>New Location?</u>
1.)	_____	\$ _____	YES / NO	YES / NO	YES / NO
2.)	_____	\$ _____	YES / NO	YES / NO	YES / NO
3.)	_____	\$ _____	YES / NO	YES / NO	YES / NO
4.)	_____	\$ _____	YES / NO	YES / NO	YES / NO

ACCOUNT CONTROL AGREEMENTS

Pursuant to Section 6.11 of the Loan Agreement, the Borrowers represent and warrant that: (i) as of the date hereof, it maintains only those deposit and investment accounts set forth below; and (ii) a control agreement has been executed and delivered to Lender with respect to each such account [Note: If the Borrowers have established any new account(s) since the date of the last compliance certificate, please so indicate].

Deposit Accounts

	<u>Name of Institution</u>	<u>Account Number</u>	<u>Control Agt. In place?</u>	<u>Complies</u>	<u>New Account</u>
1.)	_____	_____	YES / NO	YES / NO	YES / NO
2.)	_____	_____	YES / NO	YES / NO	YES / NO
3.)	_____	_____	YES / NO	YES / NO	YES / NO
4.)	_____	_____	YES / NO	YES / NO	YES / NO

Investment Accounts

	<u>Name of Institution</u>	<u>Account Number</u>	<u>Control Agt. In place?</u>	<u>Complies</u>	<u>New Account</u>
1.)	_____	_____	YES / NO	YES / NO	YES / NO
2.)	_____	_____	YES / NO	YES / NO	YES / NO
3.)	_____	_____	YES / NO	YES / NO	YES / NO
4.)	_____	_____	YES / NO	YES / NO	YES / NO

EXPLANATIONS

Very truly yours,

BACTERIN INTERNATIONAL HOLDINGS, INC.

By: _____
Name:
Title:*

* Must be executed by the Borrower's Chief Financial Officer or other executive officer.

EXHIBIT "D"
FORM OF WARRANT

EXHIBIT "E"

FORM OF LANDLORD WAIVER

EXHIBIT "F"

FORM OF LEGAL OPINION

EXHIBIT "F"

FORM OF INTELLECTUAL PROPERTY SECURITY AGREEMENT

BROADLANE CONTRACT NO. GB-365

**AGREEMENT
FOR
BONE ALLOGRAFT, DBM, AND BONE
GRAFT SUBSTITUTE PRODUCTS**

between

BROADLANE, INC.

and

BACTERIN INTERNATIONAL, INC.

EFFECTIVE DATE: MAY 1, 2010

This Agreement for Bone Allograft and Bone Graft Substitute Products (this "Agreement"), effective as of May 1, 2010 (the "Effective Date"), is between Broadlane, Inc., a Delaware corporation ("Broadlane"), and Bacterin International, Inc., a Nevada corporation ("Supplier"), and remains in effect for 3 years commencing on the Effective Date and expiring on April 30, 2013 (the "Term"). Broadlane and Supplier agree as follows:

SECTION 1

ORGANIZATION AND BACKGROUND

1.1 Definitions.

1.1.1 Broadlane Customer. "Broadlane Customer" means any health care provider (including, but not limited to, any hospital, physician office, nursing home, ambulatory surgery center, home care agency, diagnostic imaging center, long-term care facility, etc.) for whom Broadlane provides services in connection with this Agreement and that designates Broadlane as its purchasing agent. "Broadlane Customer" also includes a parent corporation of a health care provider that enters into an agreement with Broadlane designating Broadlane as the purchasing agent of the health care provider. Supplier must access a current list of Broadlane Customers at <http://vendors.broadlane.com> on a monthly basis.

1.1.2 Customer. "Customer" means any Broadlane Customer purchasing Products under this Agreement.

1.1.3 Product. "Product" means any product and service listed on Exhibit A (including maintenance, repairs, and upgrades that Supplier performs to these products and services).

1.1.4 Other Definitions. All capitalized terms not otherwise defined have the meanings given to them in Exhibit B.

1.2 Group Purchasing Agreement. This Agreement is a group purchasing agreement through which any Broadlane Customer may elect to purchase Products from Supplier. Supplier may sell the Products directly to the Customers or through an authorized distributor.

1.3 Customers. Any Broadlane Customer may elect to purchase Products under this Agreement, but this Agreement neither (a) obligates any Broadlane Customer to purchase the Products, nor (b) precludes any Broadlane Customer from purchasing Competing Products. Broadlane does not imply any participation levels by the Broadlane Customers. A Customer is bound to the terms and conditions of this Agreement by purchasing Products under this Agreement. Each Customer is liable directly to Supplier or to an authorized distributor, as applicable, for all payments and any other obligations with respect to the Products.

1.4 Broadlane. Broadlane negotiates contracts for certain products and services on behalf of the Broadlane Customers. Broadlane negotiated and entered into this Agreement as the purchasing agent of the Broadlane Customers, but is not a purchaser of the Products. Except as explicitly set forth in this Agreement, Broadlane has no liability, responsibility, or performance obligations to Supplier relating to any Product.

1.5 Supplier. Supplier sells the Products and entered into this Agreement to offer the Products for sale to all Broadlane Customers. Supplier also desires to access the BroadLink™ and the Web-based Interface so that Supplier can offer products and services to the Broadlane Customers (including the Products) through electronic means.

1.6 Distributor. If any Customer purchases any Product through an authorized distributor, then the applicable terms of the Customer's agreement with the authorized distributor govern all taxes, ordering, invoicing, payment, delivery, and return terms. For sales of any Product to any Customer through an authorized distributor, Supplier's cost of that Product to the authorized distributor must be no higher than that set forth on Exhibit A; but the ultimate price of the Product to the Customer may be higher or lower based on the terms and conditions of the Customer's agreement with the authorized distributor. Broadlane is not a party to Supplier's agreement with any authorized distributor, but Supplier must not change the financial arrangements with any authorized distributor during the Term if that change will result in increased Product prices to any Customer. No authorized distributor is a party to this Agreement, and no authorized distributor has any right as a third-party beneficiary of this Agreement. Broadlane or Supplier may disclose the terms and conditions of this Agreement with an authorized distributor as necessary to facilitate the sale of Products to Customers. Supplier must direct each authorized distributor to disclose all sales data regarding the Customers to Broadlane. For purposes of clarification, Supplier's resellers will not be considered authorized distributors under this Agreement.

SECTION 2

CUSTOMERS

2.1 Third-Party Beneficiary. Broadlane and Supplier are entering this Agreement for the express, intended benefit of the Customers, Broadlane and Supplier. Each Customer is an intended third-party beneficiary of this Agreement. Each Customer may enforce the terms and conditions of this Agreement that affect that Customer. Except as provided in this Section 2.1, there are no other third-party beneficiaries of this Agreement.

2.2 Termination of Existing Contracts. Any Broadlane Customer or Customer wishing to purchase any Product under this Agreement may, at its option and without any penalty or cost, terminate any existing contract or other arrangement with Supplier for the same Products. Supplier must not directly or indirectly contract with any Broadlane Customer or Customer for the Products during the term of this agreement.

2.3 Qualification for Participation. Any Broadlane Customer (including any entity that becomes a Broadlane Customer after the Effective Date) in any location within the United States (including the District of Columbia) and any class of trade may elect to purchase Products pursuant to the terms and conditions of this Agreement. Supplier must not allow any Broadlane Customer that withdraws or is terminated as a Broadlane Customer to purchase Products pursuant to the terms and conditions of this Agreement.

2.4 Freedom to Purchase. Regardless of anything in this Agreement to the contrary, any Broadlane Customer may elect to purchase a Competing Product without penalty.

SECTION 3

SUPPLIER

3.1 Duty to Sell; Provide Products. Except as set forth in Section 2.3, and to the extent that Products are available in Supplier's inventory, Supplier must offer to sell the Products to any Broadlane Customer electing to purchase Products under this Agreement. To the extent that Products are available in Supplier's inventory, Supplier must make each Product available to any Customer for direct purchase or to authorized distributors/wholesalers for a distributed purchase. Pursuant to the terms of this Agreement, Supplier may, subject to mutual agreement, also enter a consignment arrangement with Customer which details the procedure for Supplier providing a consignment inventory of Products at Customer's location.

3.2 Failure to Supply. Except as noted below and in Exhibit C, if Supplier fails to perform its obligations under Section 3.1, Supplier must give Broadlane and each Customer reasonable notice if a Product becomes unavailable to all of Supplier's customers because of an industry-wide shortage. Provided, however, that this Section 3.2 must not apply if Supplier is prevented from performing its obligations under Section 3.1 by an inability to obtain or shortage of available donors or other materials, an act of nature or the public enemy, terrorism, insurrections, riots, labor disputes (including lockouts or boycotts), fire, explosion, flood or government order. If so affected, Supplier must give prompt written notice to the other party of the cause and take whatever reasonable steps are necessary to relieve the effect of the cause as rapidly as possible.

3.3 Business Continuity/Disaster Plan. Supplier must have a written business continuity/disaster recovery plan, for which Supplier must maintain and test all critical components on a regular basis. Supplier's failure to restore its performance of its obligations under this Agreement within 30 days after an event requiring it to implement the business continuity/disaster recovery plan is a material breach of this Agreement.

3.4 Environmental Disclosures. Supplier must complete and attach the disclosures required by Exhibit G.

SECTION 4
PURCHASING PRODUCTS

4.1 Pricing.

4.1.1 Firm Pricing. Exhibit A sets forth the prices for each Product. Supplier must not increase these prices during the Term. Supplier may decrease the prices set forth on Exhibit A upon prior written notice to Broadlane, and this notice must include a proposed amended Exhibit A in electronic format. The net pricing includes a discount from Supplier's standard list prices. In addition to these prices, Supplier may offer bulk purchase options to the Customers that offer additional discounts based on a Customer's commitment in connection with Broadlane-sponsored "group buys" or other savings opportunities; but all other terms and conditions of this Agreement apply to those bulk purchase options as if the prices were listed on Exhibit A. If a bulk purchase option is offered to a Customer, then Supplier must provide written notice to Broadlane at the time of the offer.

4.1.2 Taxes.

4.1.2.1 Taxes on Direct Purchases. Supplier must calculate and pay any applicable local and state sales tax or other taxes with respect to the direct purchase of any Product. Unless the applicable Customer is tax-exempt, Supplier may invoice the Customer for these taxes if they are correctly and separately reflected on the invoice.

4.1.2.2 Property Taxes. The party with title to a Product must pay any property tax. Supplier must reimburse any Customer for property tax the Customer pays on a Product owned by Supplier.

4.1.3 Delivery. Supplier must deliver an ordered Product to the Delivery Location not more than two days after Supplier's receipt of the Customer's order for the Product or as otherwise agreed upon by Supplier and Customer. Supplier's normal practice employs express shippers/carriers who comply with tissue standards as stipulated by JCAHO and American Association of Tissue Banks (AATB) requirements. The risk of loss of any Product does not pass to a Customer until the Customer accepts the Product. Any actual shipping costs (no Supplier markup) will be prepaid by Supplier and added to the Customer invoice as a separate line item. Upon any Customer's written request, Supplier must ship Products "freight collect" to the Customer using the carrier and billing information provided by the Customer.

4.1.4 Access. If a Customer desires a third party to purchase any Product on its behalf (including an outsourced clinical engineering service provider, a leasing company financing the acquisition, etc.), then Supplier must (a) sell that Product to the third party at the same price, terms and conditions as though the Customer purchased the Product

directly, and (b) treat that sale as a sale to that Customer (including, but not limited to, the payment of Administrative Fees).

4.2 Ordering. Any Customer may place a purchase order for any Product through BroadLink or the Web-based Interface (if applicable), an authorized distributor, by telephone, fax, or through electronic order entry directly through Supplier at:

Bacterin International, Inc.
600 Cruiser Lane
Belgrade, MT 59714
sales@bacterin.com
Telephone No.: 406.388.0480 / 888.886.9354
Fax No.: 406.388.3380

There are no minimum order requirements or fees for any Product order, but a Customer must place an order only in Supplier's standard sale unit of measure.

4.3 Invoicing. Supplier is solely responsible for invoicing the Customers for the Products.

4.4 Payment. A Customer will pay for an ordered Product within 45 days after the Customer's receipt of the invoice. Pursuant to the terms of this Agreement, Supplier may also enter in a consignment arrangement with Customer which details the procedure for Supplier providing a consignment inventory of Products at Customer's location and includes the same level of discount from list prices if Customer complies with Supplier's 24 hour reporting of consignment utilization. An additional 2.5% discount may be taken on the invoice if payment is received by Supplier within ten days of invoice date. Supplier may enforce its reasonable credit requirements against any Customer.

4.5 Products.

4.5.1 New Products. If Supplier begins to sell a similar product not listed on Exhibit A, then Supplier must notify Broadlane within 30 days after governmental approval or Supplier's release of the product. At Broadlane's discretion, Broadlane and Supplier may amend Exhibit A to add the new Product at a mutually agreed-upon price.

4.5.2 Discontinuing Products. Supplier may discontinue the manufacture of any Product, but Supplier must replace the discontinued Product with a functionally equivalent Product at a price equal to or less than the discontinued Product.

4.5.3 New Technology. If New Technology becomes available from any source, including Supplier, then Broadlane may evaluate and contract with any supplier so the Broadlane Customers and the Customers have access to New Technology at all times. If Supplier cannot offer New Technology at comparable or lower prices, Broadlane may either (a) amend Exhibit A to add Supplier's New Technology at a mutually agreed-upon

price; or (b) contract with other suppliers for New Technology. Regardless of whether New Technology is added to this Agreement, Supplier and Broadlane will negotiate in good faith to equitably adjust the pricing for any current Product under this Agreement affected by the New Technology.

4.5.4 Product-Specific Standard Terms and Conditions. Additional terms and conditions related to the Products are set forth on Exhibit D.

4.5.5 Fill Rate. Supplier must provide each Product with a fill rate of not less than 99%.

4.6 **Returns**. Any Customer may return a Product pursuant to Supplier's return policy, as set forth on Exhibit E.

4.7 **Warranties**.

4.7.1 Product Warranties. The warranty for each Product is set forth on Exhibit F.

4.7.2 Services Warranty. Supplier represents and warrants that: (a) its Representatives have the skills and qualifications necessary to perform services under this Agreement in a timely, competent, and professional manner in accordance with the highest industry standards and all applicable governmental requirements, laws, ordinances, rules, and regulations; and (b) Supplier is able to fulfill the technical service requirements and all other services requirements of this Agreement.

4.7.3 Manufacturers' Warranties. Upon any Customer's request, Supplier must provide to Broadlane and the Customer copies of all warranties for Products that Supplier receives from its vendors and all manufacturers' warranties. Supplier assigns to Broadlane and to each Customer all vendors' and manufacturers' warranties and rights of action under these warranties and authorizes Broadlane and the Customers to enforce these warranties.

4.7.4 Warranties Cumulative. The warranties provided under this Agreement are cumulative and apply to any replacement or modification of the Products by Supplier or any of its Representatives, and these warranties are in addition to any warranties provided at law or in equity.

SECTION 5

ADMINISTRATIVE FEES

5.1 **Calculation of Administrative Fees**. Each month, Supplier must pay Broadlane a fee equal to 3% of the aggregate purchase price for all Products that Customers purchased under this Agreement during the prior calendar month, less any credits and returns (the "Administrative Fee"). Supplier must pay the Administrative Fee no later

than 30 days after the end of each applicable calendar month. Supplier must only pay an Administrative Fee on a Customer's purchases of Products pursuant to the terms and conditions of this Agreement, any related agreement, any related promotion under this Agreement, or any other applicable written agreement between Broadlane and Supplier.

5.2 Administrative Fee Payments. Supplier must pay to Broadlane interest on any past due Administrative Fee owing to Broadlane under this Agreement at the lesser of (a) 1.50% per month, or (b) the maximum interest rate legally permitted. Supplier must send to Broadlane all Administrative Fee payments due to Broadlane at the addresses set forth below:

Broadlane, Inc.
P.O. Box 915119
Dallas, Texas 75397-5119
E-mail: slsrpt@broadlane.com (for transmittal of Sales Data Reports pursuant to [Section 7.2](#))

Overnight Delivery Address

JP Morgan Chase
14800 Frye Road, TX1-0006
Fort Worth, Texas 76155
Attn: Broadlane, Inc., Lockbox # 915119

Wire Transfer

Broadlane, Inc.
JP Morgan Chase
Account # 08806397293
ABA # 113000609
Reference: (Admin. Fee, Contract Number, Payment Period)

SECTION 6

TERMINATION

6.1 Termination for Breach. If any party asserts that another party committed a material breach of this Agreement (including any failure to pay Administrative Fees), then the non-breaching party must notify the breaching party in writing of the specific breach and request that it be cured. If the breaching party does not cure the breach within 30 days after notice, then the non-breaching party may terminate this Agreement without cost or penalty by sending written notice to the breaching party.

6.2 Termination for Ineligibility. Broadlane may immediately terminate this Agreement if Supplier or any of Supplier's key personnel is convicted of an offense related to health care or listed by a federal agency as being debarred, excluded, or otherwise ineligible for federal program participation.

6.3 Effect of Termination. The termination of this Agreement by either party (a) does not excuse either party from performing any duty or obligation assumed under this Agreement before termination, (b) does not have the effect of waiving any right either party may have to obtain performance, and (c) does not preclude the non-breaching party from pursuing any and all remedies available to it at law or equity.

SECTION 7

REPORTING REQUIREMENTS

7.1 Pricing and Other Data. Supplier must provide Broadlane with pricing information (and related cross-reference, product attributes, and product categorization data) in the electronic format as set forth on <http://vendors.broadlane.com/DataTemplates.aspx>, which are subject to revision from time-to-time. Broadlane and Supplier must mutually agree upon the method of transmission of this pricing data. At Broadlane's request, Supplier must provide Broadlane with a complete catalog of all of its products (including the Products) in electronic format.

7.2 Periodic Reporting. Accompanying each Administrative Fee payment, Supplier must provide Broadlane with a Sales Data Report in an EDI 867 format. If Supplier does not have an EDI 867 capability, then Supplier must provide Broadlane with a Sales Data Report in either CSV or Excel format. The EDI 867 format and the CSV/Excel file templates for the Sales Data Report are set forth on <http://vendors.broadlane.com/DataTemplates.aspx>, which are subject to revision from time-to-time. Supplier must pay Broadlane its hourly fee for Broadlane to re-format the data Supplier sends in any format not listed here. Upon Broadlane's request, Supplier must promptly provide Broadlane with additional line-item detail of the underlying transactions of a Sales Data Report to properly allocate and report Administrative Fees.

SECTION 8

MISCELLANEOUS

8.1 Broadlane Standard Terms and Conditions. Broadlane's standard terms and conditions are set forth on [Exhibit C](#).

8.2 E-Commerce. Broadlane maintains BroadLink and the Web-based Interface as its private electronic market places. At Broadlane's request, Supplier must use either of BroadLink or the Web-based Interface, and execute a BSA or other e-commerce support agreement in a form mutually agreeable to Supplier and Broadlane within 60

days after Broadlane's request. If Supplier does not execute a BSA or other support agreement as set forth in this Section 8.2, then Broadlane may, as its sole remedy, terminate this Agreement upon 30 days' prior written notice without cost or penalty.

8.3 Visitation Policies. In connection with sending a Representative to visit any Customer, Supplier and its Representative must comply with that Customer's visitation policy. Broadlane recommends that Supplier contact each Customer directly prior to any proposed visit to obtain a current copy of that Customer's visitation policy.

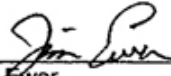
8.4 Controlling Terms. If there is a conflict between this Agreement and any other writing or correspondence between Supplier, Broadlane, or any Customer, then the terms of this Agreement control. If there is an internal conflict of terms within this Agreement, then the term found in the part of this Agreement first listed below controls: the main body of the Agreement; the exhibits in order of priority as set forth in the table following the signature blocks; any other exhibits provided to Broadlane by Supplier.

8.5 Entire Agreement. This Agreement may be executed in any number of counterparts, each of which is deemed an original but all of which constitute the same instrument. This Agreement, including all exhibits and attachments (all of which are incorporated in this Agreement by reference), constitutes the entire agreement on this subject and supersedes all previous and contemporaneous communications, representations, or agreements between Broadlane and Supplier regarding the referenced subject matter. This Agreement may not be modified orally, and no modification, amendment, or supplement is binding unless it is in writing and signed by authorized representatives of Broadlane and Supplier.

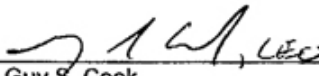
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Duly authorized representatives of the parties executed this Agreement as written below.

Broadlane, Inc.

By: 
Name: Jim Ewer
Title: Vice President, Supply Chain Services
Date: 4/23/10

Bacterin International, Inc.

By: 
Name: Guy S. Cook
Title: Chief Executive Officer
Date: 1-22-10

<u>Exhibits</u>		<u>Order of Priority</u>
A	Products and Pricing	4
B	Definitions	1
C	Broadlane's Standard Terms and Conditions	2
D	Standard Terms and Conditions – Products	3
E	Supplier's Return Policy	5
F	Supplier's Product Warranties	6
G	Environmental Disclosures	7
H	Diversity Contracting Disclosures	8
I	Customer Consignment Agreement	9
J	Supplier's Screening, Donor Selection & Safety Guidelines	10



**Child,
Van Wagoner
& Bradshaw,**

PLLC

CERTIFIED PUBLIC ACCOUNTANTS



CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors
Bacterin International Holdings, Inc.

We hereby consent to the use of our report dated June 18, 2010, with respect to the financial statements of Bacterin International, Inc. in the Registration Statement on Form S-1/A to be filed on or about December 6, 2010. We also consent to the use of our name and the reference to us in the Experts section of the Registration Statement.

Child, Van Wagoner & Bradshaw PLLC

Child, Van Wagoner & Bradshaw, PLLC
Salt Lake City, Utah
December 6, 2010

SALT LAKE CITY

5296 South Commerce Dr.
Suite 300
Salt Lake City, Utah 84107
Phone: 801.281.4700
Fax: 801.281.4701

KAYSVILLE

1284 West Flint Meadow Dr.
Suite D
Kaysville, Utah 84037
Phone: 801.927.1337
Fax: 801.927.1344

HONG KONG

Suite A, 5/F
Max Share Centre
373 King's Road
North Point, Hong Kong
Phone: +(852) 21 555 333
Fax: +(852) 21 165 222

www.cpaone.net

