

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-Q

(Mark one)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended March 31, 2012

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number: 001-34951

BACTERIN INTERNATIONAL HOLDINGS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction
of incorporation or organization)

20-5313323
(I.R.S. Employer
Identification No.)

600 CRUISER LANE
BELGRADE, MONTANA 59714
(Address of principal executive offices) (Zip code)

(406) 388-0480
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes No

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes No

Number of shares of common stock, \$0.000001 par value, of registrant outstanding at April 12, 2012: 42,425,675

BACTERIN INTERNATIONAL HOLDINGS, INC.
FORM 10-Q

TABLE OF CONTENTS

| | | |
|-----------------|--|----|
| PART I. | FINANCIAL INFORMATION | |
| Item 1. | Financial Statements | |
| | Condensed Consolidated Balance Sheets as of March 31, 2012 (unaudited) and December 31, 2011 | 5 |
| | Condensed Consolidated Statements of Operations for the three-months ended March 31, 2012 and 2011 (unaudited) | 6 |
| | Condensed Consolidated Statements of Cash Flows for the three-months ended March 31, 2012 and 2011 (unaudited) | 7 |
| | Notes to Consolidated Financial Statements | 8 |
| Item 2. | Management's Discussion and Analysis of Financial Condition and Results of Operations | 20 |
| Item 3. | Quantitative and Qualitative Disclosures About Market Risk | 22 |
| Item 4. | Controls and Procedures | 22 |
| PART II. | OTHER INFORMATION | 24 |
| Item 1. | Legal Proceedings | 24 |
| Item 1A. | Risk Factors | 24 |
| Item 2. | Unregistered Sales of Equity Securities and Use of Proceeds | 24 |
| Item 3. | Defaults Upon Senior Securities | 24 |
| Item 4. | Mine Safety Disclosures | 24 |
| Item 5. | Other Information | 24 |
| Item 6. | Exhibits | 25 |

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The statements contained in this Form 10-Q 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,” “plans,” 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 Form 10-Q 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;
- the ability of our sales force to achieve expected results;
- 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; and
- our ability to issue preferred stock.

The forward-looking statements contained in this Form 10-Q 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 in the “Risk Factors” section of our Annual Report on Form 10-K. 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.

PART I – FINANCIAL INFORMATION

Item 1. Financial Statements

| | March 31, 2012 (unaudited) | As of December 31, 2011 |
|---|----------------------------------|-------------------------------|
| ASSETS | | |
| Current Assets: | | |
| Cash and cash equivalents | \$ 1,363,629 | \$ 751,111 |
| Trade accounts receivable, net of allowance for doubtful accounts of \$1,238,398 and \$1,232,806, respectively | 7,603,437 | 7,083,354 |
| Inventories, net | 10,410,931 | 8,479,710 |
| Prepaid and other current assets | 421,306 | 289,326 |
| Total current assets | 19,799,303 | 16,603,501 |
| Non-current inventories | 968,117 | 920,542 |
| Property and equipment, net | 4,095,055 | 3,774,140 |
| Intangible assets, net | 637,343 | 656,133 |
| Goodwill | 728,618 | 728,618 |
| Other assets | 481,864 | 486,914 |
| Total Assets | \$ 26,710,300 | \$ 23,169,848 |
| LIABILITIES & STOCKHOLDERS' EQUITY | | |
| Current Liabilities: | | |
| Accounts payable | \$ 3,864,545 | \$ 2,654,263 |
| Accounts payable - related party | 616,510 | 513,193 |
| Accrued liabilities | 2,548,103 | 3,762,211 |
| Warrant derivative liability | 2,126,965 | 2,344,516 |
| Current portion of capital lease obligations | 84,308 | 33,791 |
| Current portion of long-term debt | 2,269,441 | 1,632,978 |
| Total current liabilities | 11,509,872 | 10,940,952 |
| Long-term Liabilities: | | |
| Capital lease obligation, less current portion | 196,833 | 89,580 |
| Long-term debt, less current portion | 6,017,979 | 6,638,270 |
| Total Liabilities | 17,724,684 | 17,668,802 |
| Commitments and Contingencies (Note 11) | | |
| Stockholders' Equity (Deficit) | | |
| Preferred stock, \$.000001 par value; 5,000,000 shares authorized; no shares issued and outstanding | - | - |
| Common stock, \$.000001 par value; 95,000,000 shares authorized; 42,524,107 shares issued and outstanding as of March 31, 2012 and 40,841,218 shares issued and outstanding as of December 31, 2011 | 43 | 40 |
| Additional paid-in capital | 49,984,094 | 45,452,732 |
| Retained deficit | (40,998,521) | (39,951,726) |
| Total Stockholders' Equity | 8,985,616 | 5,501,046 |
| Total Liabilities & Stockholders' Equity | \$ 26,710,300 | \$ 23,169,848 |

See notes to unaudited condensed consolidated financial statements.

BACTERIN INTERNATIONAL HOLDINGS, INC.
Condensed Consolidated Statements of Operations
(Unaudited)

| | Three Months Ended March 31, | |
|---|------------------------------|---------------------|
| | 2012 | 2011 |
| Revenue | | |
| Tissue sales | \$ 7,670,949 | \$ 5,868,924 |
| Royalties and other | 99,052 | 131,880 |
| Total Revenue | 7,770,001 | 6,000,804 |
| | | |
| Cost of tissue and medical devices sales | 1,858,722 | 987,356 |
| Gross Profit | 5,911,279 | 5,013,448 |
| | | |
| Operating Expenses | | |
| General and administrative | 2,590,772 | 2,391,843 |
| Sales and marketing | 4,146,343 | 4,264,282 |
| Depreciation and amortization | 119,074 | 52,691 |
| Non-cash consulting expense | 328,253 | 240,991 |
| Total Operating Expenses | 7,184,442 | 6,949,807 |
| | | |
| Loss from Operations | (1,273,163) | (1,936,359) |
| | | |
| Other Income (Expense) | | |
| Interest expense | (142,852) | (372,433) |
| Change in warrant derivative liability | 217,551 | 7,218,806 |
| Other income (expense) | 151,669 | 6,772 |
| Total Other Income (Expense) | 226,368 | 6,853,145 |
| | | |
| Net Loss Before (Provision) Benefit for Income Taxes | (1,046,795) | 4,916,786 |
| | | |
| (Provision) Benefit for Income Taxes | | |
| Current | - | - |
| Deferred | - | - |
| Net (Loss) Income | \$ (1,046,795) | \$ 4,916,786 |
| | | |
| Net (loss) income per share: | | |
| Basic | \$ (0.03) | \$ 0.13 |
| Dilutive | \$ (0.03) | \$ 0.11 |
| | | |
| Shares used in the computation: | | |
| Basic | 41,548,087 | 37,330,665 |
| Dilutive | 41,548,087 | 44,419,879 |

See notes to unaudited condensed consolidated financial statements.

BACTERIN INTERNATIONAL HOLDINGS, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)

| | Three Months Ended March 31, | |
|---|------------------------------|--------------------|
| | 2012 | 2011 |
| Operating activities: | | |
| Net (loss) income | \$ (1,046,795) | \$ 4,916,786 |
| Noncash adjustments: | | |
| Depreciation and amortization | 213,542 | 291,429 |
| Amortization of debt discount | 26,854 | |
| Non-cash consulting expense/stock option expense | 518,536 | 665,199 |
| Provision for losses on accounts receivable and inventory | 5,592 | 118,334 |
| Change in derivative warrant liability | (217,551) | (7,213,037) |
| Reduction of contingent liability | (212,026) | - |
| Changes in operating assets and liabilities: | | |
| Accounts receivable | (525,675) | (684,948) |
| Notes receivable | - | (41,427) |
| Inventories | (1,978,796) | (621,239) |
| Prepaid and other current assets | (126,930) | 51,098 |
| Accounts payable | 1,313,599 | 395,683 |
| Accrued liabilities | (909,349) | 533,369 |
| Net cash used in operating activities | (2,938,999) | (1,588,753) |
| Investing activities: | | |
| Purchases of property and equipment | (347,659) | (156,398) |
| Intangible asset additions | - | (69,103) |
| Net cash used in investing activities | (347,659) | (225,501) |
| Financing activities: | | |
| Proceeds from the issuance of long-term debt | - | 1,825,000 |
| Payments on long-term debt | (10,682) | (3,740) |
| Payments on capital leases | (10,237) | (10,508) |
| Proceeds from issuance of stock | 3,899,996 | - |
| Proceeds from exercise of options | 20,099 | - |
| Proceeds from exercise of warrants | - | 51,434 |
| Net cash provided by financing activities | 3,899,176 | 1,862,186 |
| Net change in cash and cash equivalents | 612,518 | 47,932 |
| Cash and cash equivalents at beginning of period | 751,111 | 327,481 |
| Cash and cash equivalents at end of period | \$ 1,363,629 | \$ 375,413 |

See notes to unaudited condensed consolidated financial statements.

Notes to Consolidated Financial Statements

(1) Business Description and Summary of Significant Accounting Policies

Business Description

The accompanying consolidated financial statements include the accounts of Bacterin International Holdings, Inc., a Delaware corporation, and its wholly owned subsidiary, Bacterin International, Inc., a Nevada corporation, (collectively, the “Company” or “Bacterin”). All intercompany balances and transactions have been eliminated in consolidation. Bacterin’s biologics division develops, manufactures and markets biologics products to domestic and international markets. Bacterin’s proprietary methods are used in human allografts to create stem cell scaffolds 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.

The accompanying interim condensed consolidated financial statements of Bacterin for the three months ended March 31, 2012 and 2011 are unaudited and are prepared in accordance with accounting principles generally accepted in the United States of America. They do not include all disclosures required by generally accepted accounting principles for annual financial statements, but in the opinion of management, include all adjustments, consisting only of normal recurring items, necessary for a fair presentation. Interim results are not necessarily indicative of results which may be achieved in the future for the full year ending December 31, 2012.

These financial statements should be read in conjunction with the financial statements and notes thereto which are included in Bacterin’s Annual Report on Form 10-K for the year ended December 31, 2011. The accounting policies set forth in those annual financial statements are the same as the accounting policies utilized in the preparation of these financial statements, except as modified for appropriate interim financial statement presentation.

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.

An operating segment is a component of an enterprise whose operating results are regularly reviewed by the enterprise’s chief operating decision maker to make decisions about resources to be allocated to the segment and assess its performance. The primary performance measure used by management is net income or loss. The Company operates in two distinct lines of business consisting of the biologics and devices divisions. However, due to the immaterial revenue from devices to date, the Company reports as one segment.

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.

Concentrations and Credit Risk

The Company’s accounts receivable are due from a variety of health care organizations and distributors throughout the world. Approximately 99% and 98% of sales were in the United States for the first quarter of 2012 and 2011, respectively. One customer represented 7% and 4% of revenue for the first quarter of 2012 and 2011, respectively. One customer represented 19% and 6% of accounts receivable at March 31, 2012 and March 31, 2011, respectively. The Company provides for uncollectible amounts when specific credit issues arise. Management’s estimates for uncollectible amounts have been adequate during prior periods, and management believes that all significant credit risks have been identified at March 31, 2012.

Revenue by geographical region is as follows:

| | Three months ended March 31, | |
|---------------|---------------------------------|---------------------|
| | 2012 | 2011 |
| United States | \$ 7,654,923 | \$ 5,894,215 |
| Rest of World | 115,078 | 106,589 |
| | <u>\$ 7,770,001</u> | <u>\$ 6,000,804</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 trade receivables and deferred income tax assets; valuation of the warrant derivative liability; inventory reserve; contingent consideration from acquisitions; and estimates for the fair value of stock options grants and other equity awards upon which the Company determines 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. At times the Company maintains deposits in financial institutions in excess of federally insured limits.

Accounts 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 early pay. 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, general economic conditions that may affect a customer's ability to pay and management judgment. 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.

Accounts Payable - Related Party

Accounts payable to a related party included amounts due to American Donor Services, a supplier of donors to the Company (See Note 15).

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. The Company calculates an inventory reserve for estimated obsolescence or excess inventory based on historical usage and sales, as well as assumptions about future demand for its products. These estimates for excess and obsolete inventory are reviewed and updated on a quarterly basis. Increases in the inventory reserves result in a corresponding expense, which is generally recorded to cost of tissue and medical devices sales.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation 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. Leasehold improvements are depreciated over the shorter of their estimated useful life or the remaining term of the lease. Repairs and maintenance are expensed as incurred.

Goodwill

Goodwill represents the excess of costs over fair value of assets of businesses acquired. Goodwill and intangible assets acquired in a purchase business combination and determined to have indefinite useful lives are not amortized, but instead are tested for impairment at least annually and whenever events or circumstances indicate the carrying amount of the asset may not be recoverable. In its evaluation of goodwill, the Company performs an assessment of qualitative factors to determine if it is more-likely-than-not that goodwill might be impaired and whether it is necessary to perform the two-step goodwill impairment. The Company conducts its annual impairment test on December 31 of each year. See further discussion of goodwill in Note 3 below.

Derivative Instruments

The Company accounts for its derivative instruments in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 815 "Accounting for Derivative Instruments and Hedging Activities". The only derivative instruments presented in the accompanying consolidated financial statements relates to warrants issued in connection with certain debt financings. The Company has not designated its warrant derivative liability as a hedging instrument as described in ASC 815 and any changes in the fair market value of the warrant derivative liability is recognized in the statement of operations during the period of change. See Note 10, "Warrants" below.

Intangible Assets

Intangible assets with estimable useful lives must be amortized over their respective estimated useful lives to their estimated residual values, and reviewed for impairment whenever events or circumstances indicate their carrying amount may not be recoverable. Intangible assets primarily consist of patents and 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.

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 or 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 ships to certain customers under consignment arrangements whereby the Company's product is stored by the customer. The customer is required to report the use to the Company and upon such notice, the Company invoices the customer and revenue is recognized when above criteria has been met.

The Company also receives royalty revenue from third parties related to licensing agreements. The Company has royalty agreements with Nufix, RyMed and Bard Access Systems. Revenue under these agreements represented less than 1% of total revenue for the first quarters of 2012 and 2011.

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.

Non Cash Consulting Expense

From time to time, the Company issues restricted stock awards to consultants and advisors to the Company. These awards are marked to market ratably over the vesting period and are recorded in Non cash consulting expense.

Advertising Costs

The Company expenses advertising costs as incurred. Advertising costs of approximately \$18,000 and \$21,000 were expensed for the three months ended March 31, 2012 and 2011, respectively.

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 accounts for income taxes under the asset and liability method of accounting for deferred taxes as prescribed under FASB 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 basis. 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. ASC 740 also requires reporting of taxes based on tax positions that meet a more-likely-than-not standard and that are measured at the amount that is more-likely-than-not to be realized. Differences between financial and tax reporting which do not meet this threshold are required to be recorded as unrecognized tax benefits. ASC 740 also provides guidance on the presentation of tax matters and the recognition of potential IRS interest and penalties. The Company classifies penalty and interest expense related to income tax liabilities as an income tax expense. There are no significant interest and penalties recognized in the statement of operations or accrued on the balance sheet. See further discussion and disclosures in Note 12.

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. No impairment was recorded in the first quarter of 2012 or 2011.

Net Loss Per Share

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted average number of common shares outstanding. Shares issued during the period and shares reacquired during the period are weighted for the portion of the period that they were outstanding. Diluted net income (loss) per share is computed in a manner consistent with that of basic earnings per share while giving effect to all potentially dilutive common shares outstanding during the period, which include the assumed exercise of stock options and warrants using the treasury stock method. Diluted net loss per share was the same as basic net loss per share for the quarter ended March 31, 2012 as shares issuable upon the exercise of stock options and warrants were anti-dilutive as a result of the net losses incurred for those periods.

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

| Net Income (Loss) Per Share: | Three months ended March 31, | |
|--|---------------------------------|--------------|
| | 2012 | 2011 |
| Net Income (Loss) | \$ (1,046,795) | \$ 4,916,786 |
| Basic net income (loss) per share | \$ (0.03) | \$ 0.13 |
| Diluted net income per share | \$ (0.03) | \$ 0.11 |
| Weighted average common shares outstanding for basic net income (loss) per share | 41,548,087 | 37,330,665 |
| Weighted average common shares outstanding for diluted net income per share | 41,548,087 | 44,419,879 |

Dilutive earnings per share are not reported for the three months ended March 31, 2012 as the effect of including outstanding stock options and warrants is anti-dilutive.

Stock-Based Compensation

The Company records stock-compensation expense according to the provisions of ASC 718. 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.

Fair Value of Financial Instruments

The carrying values of financial instruments, including trade accounts receivable, accounts payable, other accrued expenses and long-term debt, approximate their fair values based on terms and related interest rates.

We follow a framework for measuring fair value. The framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets.

Level 2: Inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. During the three months ended March 31, 2012 and March 31, 2011, there was no reclassification in financial assets or liabilities between Level 1, 2 or 3 categories.

The following tables set forth by level, within the fair value hierarchy, our assets and liabilities as of March 31, 2012 and December 31, 2011 that are measured at fair value on a recurring basis:

Warrant derivative liability

| | As of March 31, 2012 | As of December 31, 2011 |
|---------|----------------------------|-------------------------------|
| Level 1 | - | - |
| Level 2 | - | - |
| Level 3 | \$ 2,126,965 | \$ 2,344,516 |

Acquisition contingent consideration liability

| | As of March 31, 2012 | As of December 31, 2011 |
|---------|----------------------------|-------------------------------|
| Level 1 | - | - |
| Level 2 | - | - |
| Level 3 | \$ 238,140 | 450,166 |

The valuation technique used to measure fair value of the warrant liability and contingent consideration is based on a lattice model and significant assumptions and inputs determined by us.

Level 3 Changes

The following is a reconciliation of the beginning and ending balances for liabilities measured at fair value on a recurring basis using significant unobservable inputs (Level 3) during the period ending March 31, 2012:

| <i>Warrant derivative liability</i> | |
|-------------------------------------|--------------|
| Balance at January 1, 2012 | \$ 2,344,516 |
| Gain recognized in earnings | (217,551) |
| Balance at March 31, 2012 | \$ 2,126,965 |

| <i>Acquisition contingent consideration liability</i> | |
|---|------------|
| Balance at January 1, 2012 | \$ 450,166 |
| Reduction recognized in earnings | (212,026) |
| Balance at March 31, 2012 | \$ 238,140 |

During the three months ended March 31, 2012, the Company did not change any of the valuation techniques used to measure its liabilities at fair value.

Recent Accounting Pronouncements

In September 2011, the FASB issued ASU 2011-08 on testing goodwill for impairment that will become effective for the Company in the first quarter of 2012; however, early adoption is permitted. Under the new guidance, an entity has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the entity determines that this threshold is not met, then performing the two-step impairment test is unnecessary. The Company elected to early adopt this pronouncement in 2011.

(2) Equity

In the second quarter of 2011, we raised net \$2,974,618 in a private placement transaction under Rule 506 of Regulation D. The transaction resulted in the issuance of 939,377 shares of our common stock and warrants to purchase 375,747 shares of our common stock.

On July 29, 2011, we entered into Loan and Security Agreement with MidCap Funding III, LLC (“MidCap”), whereby MidCap and Silicon Valley Bank (“SVB”) agreed to provide a \$15 million credit facility which allowed us to borrow \$7 million and up to an additional \$8 million in connection with a permitted acquisition through December 31, 2011. The \$8 million portion expired unused as of December 31, 2011. The credit facility is secured by substantially all of our assets and carries an interest rate of LIBOR plus 7.5%, subject to a LIBOR floor rate of 3%. Repayment was interest only for the first nine months, with principal and interest for the subsequent 33 months.

On May 27, 2011, we entered into a Purchase Agreement and Registration Rights Agreement with Lincoln Park Capital Fund, LLC (“LPC”) whereby LPC agreed to purchase up to \$31 million of our common stock from time to time pursuant to the terms of the Purchase Agreement and we agreed to register the shares purchased by LPC. Upon signing the Purchase Agreement, LPC purchased 326,798 shares of our common stock for \$1,000,002 and also received warrants to purchase 130,719 shares at an exercise price of \$3.06 per share, the closing price on May 26, 2011, as part of a private placement transaction pursuant to Rule 506 of Regulation D in the second quarter of 2011 in which we raised a total of \$3,027,504 and issued 939,377 shares of our common stock and warrants to purchase 375,747 shares of our common stock.

In consideration for entering into the Purchase Agreement, we issued 128,506 shares of our common stock to LPC as initial commitment shares and we agreed to issue up to 164,675 additional commitment shares on a pro rata basis when LPC purchases additional shares. We may terminate the Purchase Agreement at any time at our sole discretion without any cost to us.

In addition, LPC has committed to invest, up to an additional \$30 million through the purchase of shares of our common stock from time to time. The transactions will be at our sole option with no additional warrants granted.

During the first quarter of 2012, pursuant to our previously disclosed May 27, 2011 Purchase Agreement with Lincoln Park Capital Fund, LLC (“LPC”) and S-3 registration statement declared effective on July 19, 2011, we issued 1,475,037 shares of our common stock to LPC for aggregate proceeds of \$3,899,996. We intend to use the proceeds for working capital and general corporate purposes.

(3) Acquisition

On July 11, 2011, we signed an Asset Purchase Agreement (“Agreement”) with Robinson MedSurg, LLC (“Seller”), a company engaged in the manufacture, distribution and sale of implantable medical devices for maxillofacial, craniofacial and orthopedic uses. These products are used by many of our current customers and therefore represents an opportunity to expand our product offerings to these customers. Under the terms of the Agreement, we purchased certain assets from Seller, as described in the Agreement, for \$1 million in common stock. In addition, we agreed to pay Seller an additional \$500,000 in common stock when gross revenue from the sale of products resulting from the purchased assets (“Products”) equals or exceeds \$1 million, and an additional \$500,000 in common stock when gross revenue from the sale of Products equals or exceeds \$2 million, provided that such gross revenue thresholds are achieved within 2 years. We also engaged the sole member of Seller as a consultant. We accounted for this business combination under the acquisition method in accordance with ASC 805 – Business Combinations, which requires the acquiring entity in a business combination to recognize all (and only) the assets acquired and liabilities assumed in the transaction; establishes the acquisition-date fair value as the measurement objective for all assets acquired and liabilities assumed; and requires the acquirer to disclose to investors and other users all of the information they need to evaluate and understand the nature and financial effect of the business combination.

The purchase price was allocated as follows:

| | | |
|----------------------|----|-----------|
| Finished inventory | \$ | 504,827 |
| Customer list | | 157,077 |
| Trademark | | 59,644 |
| Goodwill | | 728,618 |
| | | <hr/> |
| Total purchase price | \$ | 1,450,166 |

Goodwill is primarily made up of business synergies expected from the additional product offerings through our established distribution network. Goodwill is not expected to be deductible for tax purposes.

The consideration for the purchase price was made up of the following components:

| | | |
|--------------------------|----|-----------|
| Stock issued | \$ | 1,000,000 |
| Contingent consideration | | 450,166 |
| Total consideration | \$ | 1,450,166 |

The initial valuation of the contingent consideration was based upon management's estimates of the probability of reaching the milestones that would trigger the requirement to pay the contingent amounts. During the first quarter of 2012, management reviewed and adjusted the assumptions associated with the contingent liability which resulted in a reduction of the contingent liability to \$238,140 as of March 31, 2012.

The useful lives of the Customer List and the Trademark are 5 years and 15 years, respectively resulting in the following amortization schedule:

| | |
|----------------|-------------------|
| Remaining 2012 | 26,544 |
| 2013 | 35,392 |
| 2014 | 35,392 |
| 2015 | 35,392 |
| 2016 | 35,392 |
| Thereafter | 22,065 |
| Total | <u>\$ 190,177</u> |

(4) Inventories

Inventories consist of the following:

| | March 31, 2012 | December 31, 2011 |
|--------------------------------|----------------------|----------------------|
| Current inventories | | |
| Raw materials | \$ 1,877,102 | \$ 1,612,901 |
| Work in process | 3,609,921 | 2,586,047 |
| Finished goods | 5,750,484 | 5,107,400 |
| | <u>11,237,507</u> | <u>9,306,348</u> |
| Reserve | (826,576) | (826,638) |
| Current inventories, total | <u>\$ 10,410,931</u> | <u>\$ 8,479,710</u> |
| Non-current inventories | | |
| Finished goods | \$ 968,117 | \$ 920,542 |
| Non-current inventories, total | <u>\$ 968,117</u> | <u>\$ 920,542</u> |
| Total inventories | <u>\$ 11,379,048</u> | <u>\$ 9,400,252</u> |

(5) Property and Equipment, Net

Property and equipment, net are as follows:

| | March 31, 2012 | December 31, 2011 |
|--------------------------------|---------------------|----------------------|
| Buildings | \$ 1,653,263 | \$ 1,653,263 |
| Equipment | 3,995,293 | 3,597,471 |
| Computer equipment | 423,231 | 392,375 |
| Computer software | 305,042 | 228,054 |
| Furniture and fixtures | 171,418 | 171,418 |
| Leasehold improvements | 1,357,218 | 1,357,218 |
| Vehicles | 78,306 | 68,306 |
| Total cost | <u>7,983,771</u> | <u>7,468,105</u> |
| Less: accumulated depreciation | <u>(3,888,716)</u> | <u>(3,693,965)</u> |
| | <u>\$ 4,095,055</u> | <u>\$ 3,774,140</u> |

The Company leases certain equipment under capital leases. For financial \$310,289 gross assets in Equipment, and \$37,689 of accumulated depreciation relating to assets under capital leases.

Maintenance and repairs expense for the three months ended March 31, 2012 and 2011 was \$47,654 and \$15,824, respectively. Depreciation expense related to property and equipment, including property under capital lease for the three months ended March 31, 2012 and 2011 was \$194,752 and \$147,159, respectively.

(6) Intangible Assets

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

The following table sets forth information regarding intangible assets:

| | March 31, 2012 | December 31, 2011 |
|---------------------------------|-------------------|----------------------|
| Intellectual Property | | |
| Gross carrying value | \$ 809,615 | \$ 809,615 |
| Accumulated amortization | \$ (172,272) | \$ (153,482) |
| Net carrying value | <u>\$ 637,343</u> | <u>\$ 656,133</u> |
| Aggregate amortization expense: | \$ 18,790 | \$ 53,638 |
| Estimated amortization expense: | | |
| Remainder of 2012 | | \$ 56,370 |
| 2013 | | \$ 75,160 |
| 2014 | | \$ 75,160 |
| 2015 | | \$ 75,160 |
| 2016 | | \$ 75,160 |
| Thereafter | | <u>\$ 280,333</u> |

(7) Accrued Liabilities

Accrued liabilities consist of the following:

| | March 31, 2012 | December 31, 2011 |
|----------------------------------|---------------------|----------------------|
| Acquisition contingent liability | \$ 238,140 | \$ 450,166 |
| Accrued stock compensation | 515,082 | 608,933 |
| Wages/commissions payable | 1,255,471 | 1,289,827 |
| Other accrued expenses | 539,410 | 1,413,285 |
| | <u>\$ 2,548,103</u> | <u>\$ 3,762,211</u> |

(8) Long-term Debt

On July 29, 2011, we entered into Loan and Security Agreement with MidCap Funding III, LLC ("MidCap"), whereby MidCap and Silicon Valley Bank ("SVB") agreed to provide a \$15 million credit facility which allowed us to borrow \$7 million and up to an additional \$8 million in connection with a permitted acquisition through December 31, 2011. The \$8 million portion expired unused as of December 31, 2011. The credit facility is secured by substantially all of our assets and carries an interest rate of LIBOR plus 7.5%, subject to a LIBOR floor rate of 3% and contains covenants based upon revenue thresholds, which were met as of March 31, 2012. Repayment was interest only for the first nine months, with principal and interest for the subsequent 33 months.

Long-term debt consists of the following:

| | March 31, 2012 | December 31, 2011 |
|--|---------------------|----------------------|
| Loan payable to MidCap, LIBOR plus 7.5% maturing January 2015 | \$ 4,666,667 | \$ 4,666,667 |
| Loan payable to SVB, LIBOR plus 7.5% maturing January 2015 | 2,333,333 | 2,333,333 |
| 6.00% loan payable to Valley Bank of Belgrade, \$10,746 monthly payments including interest, maturing December 24, 2030; secured by building | 1,453,501 | 1,464,183 |
| | <u>8,453,501</u> | <u>8,464,183</u> |
| Less: Current portion | (2,269,441) | (1,632,978) |
| Debt discount | (166,081) | (192,935) |
| Long-term debt | <u>\$ 6,017,979</u> | <u>\$ 6,638,270</u> |

The following is a summary of maturities due on the debt as of March 31, 2012:

| | |
|-------------------|---------------------|
| Remainder of 2012 | 1,729,813 |
| 2013 | 2,591,707 |
| 2014 | 2,594,665 |
| 2015 | 264,363 |
| 2016 | 55,445 |
| Thereafter | 1,217,508 |
| Total | \$ 8,453,501 |

(9) Stock-Based Compensation

Our Equity Incentive Plan ("The 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 the compensation committee of our Board of Directors. 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 over the requisite service period and are exercisable during the stated contractual term of the option 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 Plan has 9 million shares authorized and at March 31, 2012, we had approximately 2,414,690 shares available for issuance. Shares issued under the Plan may be authorized, but unissued, or reacquired shares.

Stock compensation expense recognized in the statement of operations for the quarters ended March 31, 2012 and 2011 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. We used a weighted-average rate of 1.99% for quarter ended March 31, 2012.

Expected Term: We do not have adequate history to estimate an expected term of stock-based awards, and accordingly, we use the short-cut method as prescribed by Staff Accounting Bulletin 107 to determine an expected term. We used a weighted-average expected term of 6.26 years for the quarter ended March 31, 2012.

- Volatility: We estimate expected volatility based on peer-companies as prescribed by ASC 718. We used a weighted-average volatility rate of 65% for the quarter ended March 31, 2012.
- Dividend Yield: The dividend yield assumption is based on our history and expectation of dividend payouts and was 0% as of March 31, 2012.

Activity under our stock option plans was as follows:

| | March 31, 2012 | | | March 31, 2011 | | |
|--------------------------|----------------|---------------------------------|---|----------------|---------------------------------|---|
| | Shares | Weighted Average Exercise Price | Weighted Average Fair Value at Grant Date | Shares | Weighted Average Exercise Price | Weighted Average Fair Value at Grant Date |
| Outstanding at January 1 | 4,828,910 | \$ 2.14 | \$ 1.01 | 3,850,743 | \$ 1.38 | \$ 0.84 |
| Granted | 622,500 | 2.36 | 1.38 | 530,250 | 4.74 | 1.53 |
| Exercised | (15,000) | 1.34 | 0.45 | - | - | - |
| Cancelled or expired | (610,000) | 1.65 | 0.78 | (251,250) | 3.22 | 2.40 |
| Outstanding at March 31 | 4,826,410 | \$ 2.23 | \$ 1.04 | 4,129,743 | \$ 1.70 | \$ 0.81 |
| Exercisable at March 31 | 1,986,093 | \$ 1.67 | \$ 0.68 | 1,522,448 | \$ 1.13 | \$ 0.58 |

The total intrinsic value of options exercised in the first quarter of 2012 was \$17,400. The aggregate intrinsic value of options outstanding as of March 31, 2012 is \$2,970,024. The aggregate intrinsic value of exercisable options as of March 31, 2012 is \$2,180,094. As of March 31, 2012, there were 2,840,317 unvested options with a weighted average fair value at the grant date of \$1.34 per option. As of March 31, 2012, the total compensation related to nonvested awards not yet recognized is \$3,789,300 and is expected to be recognized over 3.8 years.

From time to time we may grant stock options and restricted stock grants to consultants. We account for consultant stock options in accordance with ASC 505-50. Consulting 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.

The following table summarizes restricted stock award activity during the quarter ended March 31, 2012:

| | Shares |
|--------------------------------|------------------|
| Outstanding at January 1, 2012 | 1,632,900 |
| Awarded | 111,000 |
| Vested | <u>(152,900)</u> |
| Outstanding at March 31, 2012 | 1,591,000 |

The restricted stock awards generally vest over three to five year periods. The Company recognized non cash consulting expense of \$328,253 and \$240,991 for the three months ended March 31, 2012 and 2011, respectively. As of March 31, 2012, the total expense related to nonvested restricted stock awards not yet recognized is \$3,147,439 and is expected to be recognized over four years.

(10) Warrants

Associated with the second quarter of 2011 private placement of common stock, 375,747 warrants with exercise prices ranging from \$2.95 to \$3.52 were issued to the participants. Warrants issued with common stock under this private placement were recorded as additional paid in capital at their estimated fair market value of \$312,285 during the second quarter of 2011.

In connection with the July 29, 2011 MidCap financing described above, MidCap and SVB received 192,157 warrants to purchase shares of our common stock equal to 7% of the amount drawn on the credit facility divided by the exercise price of \$2.55 per share. The warrants have a seven year term. MidCap and SVB also have the right to receive additional warrants if additional amounts are drawn under the facility. The fair value of these warrants, \$227,388, was recorded as a discount to the underlying debt and APIC.

The following table summarizes our warrant activities for the period ended March 31, 2012:

| | Shares | Weighted Average Exercise Price |
|--------------------------------|------------------|--|
| Outstanding at January 1, 2012 | 6,967,529 | \$ 2.22 |
| Issued | 143,700 | 2.30 |
| Exercised | <u>(128,852)</u> | 1.77 |
| Outstanding at March 31, 2012 | 6,982,377 | \$ 2.23 |

The exercise of 128,852 warrants in the first quarter of 2012 resulted in the issuance of 42,452 shares of common stock as the warrants were exercised using the cashless feature of the warrants.

We utilize a lattice model to determine the fair market value of the warrants. The 1,570,565 warrants issued in connection with our 2010 bridge financings and the 375,000 warrants issued in connection with our 2010 WTI financing were accounted for as derivative liabilities in connection with the price protection provisions of the warrants in compliance with ASC 815. There were 133,474 additional warrants issued to WTI in the first quarter of 2011 and an additional 143,700 warrants in the first quarter of 2012 as a result of the LPC share issuance triggering the anti-dilution clause in the original warrant agreement. The lattice model accommodates the probability of exercise price adjustment features as outlined in the warrant agreements. We recorded an unrealized gain of \$217,551 resulting from the change in the fair value of the warrant derivative liability for the quarter ended March 31, 2012, respectively. Under the terms of the warrant agreement, at any time while the warrant is outstanding, the exercise price per share can be reduced to the price per share of future subsequent equity sales of our common stock or common stock equivalents that is lower than the exercise price per share as stated in the warrant agreement.

The estimated fair value was derived using the lattice model with the following weighted-average assumptions:

| | |
|--|------------|
| Value of underlying common stock (per share) | \$ 1.29 |
| Risk free interest rate | 0.38% |
| Expected term | 4.60 years |
| Dividend yield | 0% |
| Volatility | 65% |

The following table summarizes our activities related to our warrants used in the derivative liability for the period ended March 31, 2012:

| | |
|----------------------------|----------------|
| Balance at January 1, 2011 | 1,506,007 |
| Derivative warrants issued | <u>143,700</u> |
| Balance at March 31, 2012 | 1,649,707 |

(11) Commitments and Contingencies

Operating Leases

We lease two office facilities under non-cancelable operating lease agreements with expiration dates in 2013. For one facility, we have the option to extend the lease for another ten year term and have right of first refusal on any sale. We lease additional office facilities under month-to-month arrangements. Future minimum payments for the next five years and thereafter as of March 31, 2012, under these leases, are as follows:

| | | |
|-------------------|----|---------|
| Remainder of 2012 | \$ | 131,025 |
| 2013 | \$ | 93,000 |

Rent expense was \$69,000 and \$40,000 for the three months ended March 31, 2012 and 2011, respectively. Rent expense is determined using the straight-line method of the minimum expected rent paid over the term of the agreement. We have no contingent rent agreements.

Indemnifications

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

We have also agreed to indemnify our 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 us, arising out of that person's services as our director or officer or that person's services provided to any other company or enterprise at our request.

Litigation

In November 2009, a complaint was served on the Company in connection with the following court action filed in Utah state court: Yanaki and Activattek, Inc. v. Cook and Bacterin International, Inc., Case Number 090912772. The complaint involves attempts by one of the plaintiffs, Yanaki, to sell shares of the Company's common stock to a third party in a private sale. Plaintiffs claim, as their primary allegation, that the Company intentionally interfered with the sales contract. Yanaki seeks \$300,000, 358,904 shares of the Company's common stock, attorneys fees, costs and punitive damages. ActivaTek alleges that Yanaki intended to invest the proceeds from his stock sale in ActivaTek and ActivaTek lost millions of dollars from not receiving that investment. ActivaTek seeks \$5 to \$10 million, attorneys fees, costs and punitive damages. The Company believes this case lacks merit and plans to vigorously defend these claims.

On March 2, 2012, Bacterin International, Inc. ("Bacterin") filed a Complaint and Jury Demand in the United States District Court for the District of Colorado in Civil Action No. 12cv558-REB-MEH against Tissue Transplant Technology, Ltd, a Texas Limited Partnership and its general partner T-TOT, LLC, a Texas Limited Liability Company; and Transplant Technologies of Texas, Ltd, a Texas Limited Partnership, and its general partners TTT, LLC, a Texas Limited Liability Company and JW Management, LLC, a Texas Limited Liability Company. Defendant Tissue Transplant Technology, LTD is using the trademark "Sterisponge" to identify various allograft products in the marketplace. In view of Bacterin's prior and established rights in the mark "Osteosponge," Bacterin has asserted against Tissue Transplant Technology, LTD claims for trademark infringement under federal law, unfair competition under federal law, trademark infringement under Colorado common law, and unfair competition under Colorado common law. In addition, Bacterin has also asserted against Transplant Technologies of Texas, LTD a claim for cancellation of a Federal Registration for "Sterisponge". Bacterin seeks injunctive relief, damages and exemplary damages to be determined at trial.

On March 2, 2012, Bacterin International, Inc. ("Bacterin") filed a Complaint and Jury Demand in the United States District Court for the District of Colorado in Civil Action No. 12cv555-REB-KLM against Evologics, LLC, a Texas limited liability company. Defendant Evologics is using the trademark "Evosponge" to identify various allograft products in the marketplace. In view of Bacterin's prior and established rights in the mark "Osteosponge," Bacterin has asserted against Evologics claims for trademark infringement under federal law, unfair competition under federal law, trademark infringement under Colorado common law, and unfair competition under Colorado common law. Bacterin seeks injunctive relief, damages and exemplary damages to be determined at trial. The parties have entered into a settlement agreement whereby Evologics has agreed to discontinue use of "Evosponge" within ninety (90) days.

On April 4, 2012, Bacterin International, Inc. filed suit against SeaArk Capital, LLC and its principal, Mark Bartosh, seeking recovery of \$1,648,994 for product delivered to SeaArk in 2011. The case is pending in the United States District Court of the Eastern District of Pennsylvania. SeaArk has entered an appearance in the case but has not yet been required to file an answer asserting its defenses, if any.

On April 19, 2012, Bacterin International, Inc. filed a lawsuit in federal court in Dallas, Texas, seeking injunctive relief and damages against Shantal Howell, a former regional vice president of the company. The suit arises out of the former employee's breach of contract, breach of fiduciary duties, interference with Bacterin's business relationships, and misappropriation of Bacterin's trade secrets. The company has not yet determined the full extent of damages to be recovered in the lawsuit.

(12) Income Taxes

In evaluating the realizability of the net deferred tax assets, we take into account a number of factors, primarily relating to the ability to generate taxable income. Where it is determined that it is likely that we will be unable to realize deferred tax assets, a valuation allowance is established against the portion of the deferred tax asset. Because it cannot be accurately determined when or if we will become profitable, a valuation allowance was provided against the entire deferred income tax asset balance.

The 2007 through 2010 tax years remain open to examination by the Internal Revenue Service and the 2005 to 2010 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.

The Company did not recognize any interest or penalties related to income taxes for the three months ended March 31, 2012 and 2011.

(13) Employee Benefit Plans

As of January 1, 2011, we switched from a SIMPLE IRA to a 401(k) retirement plan. Qualified employees may defer their salary and the deferrals are matched up to 2%. The 2% matching was \$92,000 for 2011 and was paid by March 31, 2012. Employees who made contributions in 2011 must have been employed as of March 31, 2012 to be eligible for the matching contribution. The plan covers substantially all full-time employees. Under the terms of the plan, participants may contribute up to the lower of \$16,500 of their salary or the statutorily prescribed limit to the plan. Employees are eligible after six months of employment and may enroll twice a year in January and July.

(14) Supplemental Disclosure of Cash Flow Information

Supplemental cash flow information is as follows:

| | Three months ended | |
|---|--------------------|------------|
| | March 31, | |
| | 2012 | 2011 |
| Supplemental disclosure of cash flow information | | |
| Cash paid during the period for: | | |
| Interest | \$ 219,624 | \$ 372,433 |
| Income taxes | - | - |
| Non-cash activities: | | |
| Capital lease acquisition | \$ 168,007 | \$ - |
| Net shares issued for non-cash consulting expense | \$ 92,739 | - |

(15) Related Party Transactions

Our Chief Executive Officer serves as a Board member of West Coast Tissue Services. In addition, one of our directors, Mitchell Godfrey, serves as a Board member of American Donor Services. Both of these entities recover tissues from donors and we reimburse them for recovery fees including labor costs. These relationships benefit us, thus insuring we have a pipeline of current and future donors which is necessary for our success. As of March 31, 2012, we had an accounts payable balance of \$616,510 to American Donor Services. No compensation is paid to our Chief Executive Officer or our director for their services to those entities.

(16) Subsequent Events

On April 23, 2012, the Company secured an accounts receivable credit facility with Midcap Financial LLC and Silicon Valley Bank. The revolving loan credit facility allows Bacterin to borrow up to \$5 million through January 1, 2015. The facility allows borrowings based upon a predetermined formula of up to 80% of Bacterin's eligible accounts receivable, as defined in the credit and security agreement. The Company also amended its existing Loan and Security Agreement with MidCap to allow the Company to borrow up to an additional \$3 million for the next six months in connection with a permitted acquisition. The credit facility carries an interest rate of LIBOR plus 4%, subject to a LIBOR floor rate of 2.5%. The Company also agreed to pay a 0.5% collateral management fee on the average outstanding balance of the facility and 1% of the average unused portion of the facility, as well as a 1% origination fee. Prepayment penalties apply.

On May 3, 2012, we provided LPC with notice of termination of our Purchase Agreement dated May 27, 2011. The Purchase Agreement allowed us to require LPC to purchase up to \$30 million of our common stock from time to time, and also allowed us to terminate the Purchase Agreement for any reason or for no reason with one business day's notice to LPC with no termination penalties.

Item 2 Management's Discussion and Analysis of Financial Condition and Results of Operation

This Management's Discussion and Analysis of Financial Condition and Results of Operations contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements include statements relating to the intended usage and markets for our products and services, the market for our common stock, and our liquidity, results of operations, and ability to meet our anticipated cash requirements. Actual results could differ materially from those currently anticipated as a result of a number of factors, including those set forth under "Risk Factors" in our Annual Report on Form 10-K filed with the SEC on March 29, 2012.

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 report. 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 International, Inc., a Nevada corporation ("Bacterin").

Comparison of Three Months Ended March 31, 2012 and March 31, 2011

Revenue

Total revenue for the three months ended March 31, 2012 increased 29% to \$7,770,001 compared to \$6,000,804 in the comparable prior year period. The increase of \$1,769,197 was largely the result of increased sales generated from our direct sales force and independent distributors compared to the first quarter of 2011. In the middle of 2009, we transitioned from a 100% distributor based sales model to a hybrid model which includes sales from our direct sales force as well as independent distributors which has increased the market penetration of our products.

Cost of tissue and medical devices sales

Costs of tissue sales consist primarily of tissue and medical device manufacturing costs. Costs of sales increased by 88% or \$871,366 to \$1,858,722 from \$987,356 for the three months ended March 31, 2011. The increase was largely the result of increased costs associated with our higher sales. In the last quarter of 2011, we experienced an increase to the percentage of our general and administrative overhead expense allocated to cost of tissue sales based upon increased production which resulted in a higher cost of tissue sales than the prior year period. As a percentage of tissue sales, cost of tissue sales was 24% of revenues for the first quarter of 2012 compared to 16% in the comparable prior year period.

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 3%, or \$234,635, for the three months ended March 31, 2012 compared to the three months ended March 31, 2011. Fluctuations are discussed below:

General and Administrative

General and administrative expenses consist principally of corporate personnel cash based and stock option compensation related costs and corporate expenses for legal, accounting and other professional fees as well as occupancy costs. General and administrative expenses increased 8%, or \$198,929, to \$2,590,772, for the three months ended March 31, 2012 compared to the same period of 2011. The increase is primarily due to higher administrative costs supporting the higher revenue which was partially offset by the higher percentage of our corporate general and administrative overhead allocated to inventory and cost of sales.

Selling and Marketing

Selling and marketing expenses primarily consist of costs for commissions, sales wages, trade shows, sales conventions and meetings, travel expenses, advertising and other sales and marketing related costs. In addition, stock option compensation expense associated with our sales force is also included in sales and marketing expenses. Selling and marketing expenses decreased 3%, or \$117,939, to \$4,146,343 for the three months ended March 31, 2012 from \$4,264,282 for the comparable prior year period. As a percentage of revenue, selling and marketing expenses decreased to 53% in the first quarter of 2012 from 71% in the first quarter of 2011. The decreases were primarily the result of more variable compensation paid to our direct sales force compared to salaries earned in the comparable period of 2011.

Depreciation and Amortization

Depreciation expense consists of depreciation of long-lived property and equipment while amortization expense consists of amortization of intangible assets. Depreciation and amortization expense increased 126% to \$119,074 for the three months ended March 31, 2012 from \$52,691 in the comparable prior year period. The increase reflects increased equipment purchases made by us during 2011, including the acquisition of Robinson MedSurg.

Non-cash Consulting Expense

Non-cash consulting expense consists of non-cash expense associated with granting restricted stock to consultants. Non-cash consulting expense increased \$87,262 to \$328,253 for the three months ended March 31, 2012 from \$240,991 in the comparable year period, an increase of 36%. The increase is due to a higher number of consulting agreements in place as of March 31, 2012 than there were at March 31, 2011. As a percentage of revenues, non-cash consulting expense for the twelve months ended March 31, 2012 and the comparable prior year period was 4%.

Interest Expense

Interest expense is from our promissory notes and convertible debt instruments. Interest expense for the first quarter of 2012 decreased \$229,581 to \$142,852, as compared to \$372,433 in the first quarter of 2011. The decrease was the result of the payment of shareholder interest of approximately \$125,000 in the first quarter of 2011 and preferable interest rates on existing debt in 2012.

Change in Warrant Derivative Liability

For the first quarter of 2012, the Company recorded a decrease in its non cash warrant derivative liability of \$217,551 based upon the decrease in the closing price of the Company's common stock at March 31, 2012 compared to December 31, 2011. The liability is associated with the issuance of warrants as part of its convertible debt financing, and WTI financing which contain anti dilution adjustment provisions requiring the Company to record a change in the warrant derivative liability from period to period.

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 convertible debt, an equity credit line and other debt transactions. In May 2011, we established an equity credit facility with Lincoln Park Capital which provides access to up to \$30 million in cash based upon the sale of up to 5 million shares of our common stock from time to time at the Company's option. In July 2011, we closed on a \$7 million term loan transaction with Midcap Financial and Silicon Valley Bank and a portion of the proceeds were used to pay off the WTI loan and the Bridge Bank credit facility. At March 31, 2012, we had approximately \$8,967,066 of cash and cash equivalents and accounts receivables. In addition, on April 23, 2012, the Company secured an accounts receivable credit facility with Midcap Financial LLC and Silicon Valley Bank. The revolving loan credit facility allows Bacterin to borrow up to \$5 million through January 1, 2015.

Net cash used in operating activities for the first quarter of 2012 was \$2,938,999. This was primarily related to cash used to fund our operations as well as in our inventory balance of \$1,978,796. For the first quarter of 2011, net cash used in operating activities was \$1,588,753.

Net cash used in investing activities for the first quarter of 2012 was \$347,659 due to the purchase of property and equipment.

Net cash provided by financing activities was \$3,899,176 for the first quarter of 2012 which was primarily due to the cash raised through the issuance of 1,475,037 shares of our common stock to Lincoln Park Capital for aggregate proceeds of approximately \$3,899,996.

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 March 31, 2012 cash on hand and accounts receivable balance of \$8,967,066, as well as credit lines available through our equity credit facility with Lincoln Park Capital, recent accounts receivable credit facility with MidCap Financial and anticipated cash receipts from sales expected from operations will be sufficient to meet our anticipated cash requirements through June 30, 2013. We incurred approximately \$19 million in sales and marketing expenses in 2011 and expect to incur \$26 million in 2012 as our revenues continue to increase. The increased sales and marketing expenses are largely variable expenses and are anticipated to be funded from operating cash flow. The incurrence of these additional expenses may impact our operating results and there can be no assurance of their effectiveness. 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.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

As a smaller reporting company, we are not required to provide the information required by this Item.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our senior management with the participation of our chief executive officer and chief financial officer evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a – 15(e) under the Exchange Act) as of March 31, 2012. Based upon that evaluation, we concluded that as of March 31, 2012, our disclosure controls and procedures were ineffective due to the material weakness in our internal controls over financial reporting detailed below that have not been fully remediated as of March 31, 2012.

Management's Report on Internal Control over Financial Reporting

Management is responsible for maintaining adequate internal control over financial reporting as such term is defined in rule 13a-15 (f) under the Securities and Exchange Act of 1934 as amended. Under the supervision and with the participation of senior and executive management, we conducted an evaluation of our internal controls over financial reporting based upon the framework Internal Control – Integrated Framework as outlined by COSO, the Committee of Sponsoring Organizations of the Treadway Commission. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of an evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

Based on our evaluation under the framework Internal Control – Integrated Framework, management concluded that our internal control over financial reporting was ineffective as of March 31, 2012 due to material weaknesses in our internal control over financial reporting that have not been fully remediated as of March 31, 2012 as detailed below:

1) During 2011, the Company kept its inventory records under a separate operating system than its accounting system. Accordingly, duplicate input was required for both systems, increasing the risk of errors in recording inventory transactions while requiring numerous reconciliations to be performed by Company personnel. In addition, the inventory system did not have the capability to generate historical detailed inventory reports which limited our ability to reconcile discrepancies between the accounting system and the inventory system.

Our efforts to remediate the weakness include the following:

- During 2011, we purchased an integrated accounting operating and inventory system, and on December 28, 2011, we switched over to the new system. We believe our new system will substantially improve our ability to track our inventory.

2) Insufficient number of personnel with the appropriate level of experience and technical expertise to appropriately resolve routine, including monthly and quarterly sales and accounts payable cutoff timing, as well as complex accounting matters while completing the financial statement close process. Until this design deficiency in our internal control over financial reporting is remediated, there is a reasonable possibility that a material misstatement in our annual or interim financial statements could occur and not be corrected or prevented by our internal control system in a timely manner.

Our efforts to remediate this weakness include the following:

- We hired an outside consultant to advise us on certain technical accounting issues
- We plan to expand the hiring of qualified accounting and finance personnel throughout 2012.

3) The documentation surrounding equity transactions for employees and consultants needs to be strengthened to comply with procedures outlined by the Company to ensure that all equity related transactions are properly recorded in the appropriate periods.

Our efforts to remediate the weakness include the following:

- Development of a standard operating procedure for the grant of all equity securities including the approval process by the Compensation Committee and the Board of Directors.

PART II – OTHER INFORMATION

Item 1. Legal Proceedings

In November 2009, a complaint was served on the Company in connection with the following court action filed in Utah state court: Yanaki and Activattek, Inc. v. Cook and Bacterin International, Inc., Case Number 090912772. The complaint involves attempts by one of the plaintiffs, Yanaki, to sell shares of the Company's common stock to a third party in a private sale. Plaintiffs claim, as their primary allegation, that the Company intentionally interfered with the sales contract. Yanaki seeks \$300,000, 358,904 shares of the Company's common stock, attorneys fees, costs and punitive damages. ActivaTek alleges that Yanaki intended to invest the proceeds from his stock sale in ActivaTek and ActivaTek lost millions of dollars from not receiving that investment. ActivaTek seeks \$5 to \$10 million, attorneys fees, costs and punitive damages. The Company believes this case lacks merit and plans to vigorously defend these claims.

On March 2, 2012, Bacterin International, Inc. ("Bacterin") filed a Complaint and Jury Demand in the United States District Court for the District of Colorado in Civil Action No. 12cv558-REB-MEH against Tissue Transplant Technology, Ltd, a Texas Limited Partnership and its general partner T-TOT, LLC, a Texas Limited Liability Company; and Transplant Technologies of Texas, Ltd, a Texas Limited Partnership, and its general partners TTT, LLC, a Texas Limited Liability Company and JWL Management, LLC, a Texas Limited Liability Company. Defendant Tissue Transplant Technology, LTD is using the trademark "Sterisponge" to identify various allograft products in the marketplace. In view of Bacterin's prior and established rights in the mark "Osteosponge," Bacterin has asserted against Tissue Transplant Technology, LTD claims for trademark infringement under federal law, unfair competition under federal law, trademark infringement under Colorado common law, and unfair competition under Colorado common law. In addition, Bacterin has also asserted against Transplant Technologies of Texas, LTD a claim for cancellation of a Federal Registration for "Sterisponge". Bacterin seeks injunctive relief, damages and exemplary damages to be determined at trial.

On March 2, 2012, Bacterin International, Inc. ("Bacterin") filed a Complaint and Jury Demand in the United States District Court for the District of Colorado in Civil Action No. 12cv555-REB-KLM against Evologics, LLC, a Texas limited liability company. Defendant Evologics is using the trademark "Evosponge" to identify various allograft products in the marketplace. In view of Bacterin's prior and established rights in the mark "Osteosponge," Bacterin has asserted against Evologics claims for trademark infringement under federal law, unfair competition under federal law, trademark infringement under Colorado common law, and unfair competition under Colorado common law. Bacterin seeks injunctive relief, damages and exemplary damages to be determined at trial. The parties have entered into a settlement agreement whereby Evologics has agreed to discontinue use of "Evosponge" within ninety (90) days.

On April 4, 2012, Bacterin International, Inc. filed suit against SeaArk Capital, LLC and its principal, Mark Bartosh, seeking recovery of \$1,648,994 for product delivered to SeaArk in 2011. The case is pending in the United States District Court of the Eastern District of Pennsylvania. SeaArk has entered an appearance in the case but has not yet been required to file an answer asserting its defenses, if any.

On April 19, 2012, Bacterin International, Inc. filed a lawsuit in federal court in Dallas, Texas, seeking injunctive relief and damages against Shantal Howell, a former regional vice president of the company. The suit arises out of the former employee's breach of contract, breach of fiduciary duties, interference with Bacterin's business relationships, and misappropriation of Bacterin's trade secrets. The company has not yet determined the full extent of damages to be recovered in the lawsuit.

Item 1A Risk Factors

As a smaller reporting company, we are not required to provide the information required by this Item.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

During the first quarter of 2012, pursuant to our previously disclosed May 27, 2011 Purchase Agreement with Lincoln Park Capital Fund, LLC ("LPC") and S-3 registration statement declared effective on July 19, 2011, we issued 1,475,037 shares of our common stock to LPC for aggregate proceeds of \$3,899,996. We intend to use the proceeds for working capital and general corporate purposes. We terminated our Purchase Agreement with LPC on May 3, 2012.

Item 3. Defaults Upon Senior Securities

None

Item 4 Mine Safety Disclosures

Not Applicable

Item 5. Other Information

None

Item 6. Exhibits

- 3.1 Certificate of Incorporation (filed as Exhibit 3.1 to Form 10-Q filed November 14, 2011, incorporated by reference herein)
- 3.2 Amended and Restated Bylaws (filed as Exhibit 3.2 to Form 8-K filed January 12, 2011, incorporated by reference herein)
- 10.19 Termination of Consulting Agreement with David Jacofsky
- 10.22 Employment Agreement with Gregory Juda
- 10.23 Form of Stock Option Agreement
- 31.1 Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer
- 31.2 Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer
- 32.1 Section 1350 Certification of Chief Executive Officer
- 32.2 Section 1350 Certification of Chief Financial Officer

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

BACTERIN INTERNATIONAL HOLDINGS, INC.

Date: May 4, 2012

By: /s/ Guy Cook
Name: Guy Cook
Title: President and Chief Executive Officer

Date: May 4, 2012

By: /s/ John P, Gandolfo
Name: John P, Gandolfo
Title: Chief Financial Officer



April 5, 2012

Dr. David Jacofsky
3010 W. Agua Fria Freeway, Suite 100
Phoenix, AZ 85027

Dear Dr. Jacofsky:

This letter serves to confirm our mutual agreement to terminate your Consulting Agreement dated August 11, 2011, effective as of April 5, 2012. For avoidance of doubt, your prior Consulting Agreement dated August 10, 2010 shall remain in effect.

Please indicate your agreement regarding the termination of your August 11, 2011 Consulting Agreement by signing below.

Very truly yours,

Bacterin International Holdings, Inc.

/s/ Guy Cook

By: Guy Cook, CEO

AGREED AND ACCEPTED

/s/ David Jacofsky
David Jacofsky

www.bacterin.com

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Phone: 406-388-0480 • Fax: 406-388-1354 • sales@bacterin.com

Bacterin Biologics • 600 Cruiser Lane • Belgrade, MT 59714
Phone: 406-388-0480 • Toll Free: 888-886-9354
Fax: 406-388-0422 • sales@bacterin.com

EMPLOYMENT AGREEMENT

This Employment Agreement (“Agreement”) is entered into by and between Bacterin International, Inc. (“Company”), and Greg Juda an Individual (“Employee”), and is effective on the date on April 1, 2012 (“Effective Date”).

In consideration of the mutual promises, covenants and agreements contained in this Agreement, and other good and valuable consideration, including but not limited to Employee’s employment by the Company, the sufficiency and receipt of which is hereby acknowledged, the Parties agree as follows:

1. EMPLOYMENT AND DUTIES.

A. Employment. Company hereby agrees to employ Employee, and Employee hereby accepts employment from Company, as Chief Scientific Officer on the terms and subject to the conditions set forth in this Agreement.

B. Employment “At-Will” Relationship. Employee is employed on an “at-will” basis, which means that the Company or Employee has the right to terminate Employee’s employment relationship with the Company at any time, with or without cause and with or without notice.

C. Full-Time Best Efforts. Employee agrees to devote Employee’s full professional time and attention to the business of the Company (and its subsidiaries, affiliates, or related entities) and the performance of Employee’s obligations under this Agreement, and will at all times faithfully, industriously and to the best of Employee’s ability, experience and talent, perform all of Employee’s obligations hereunder. The Employee shall not, at any time during Employee’s employment by the Company, directly or indirectly, act as a partner, officer, director, consultant, employee, or provide services in any other capacity to any other business enterprise without the prior written consent and approval of an authorized representative of the Company.

D. Duty of Loyalty. Employee acknowledges that during Employee’s employment with the Company, Employee has participated in and will participate in relationships with existing and prospective clients, customers, partners, suppliers, service providers and vendors of the Company that are essential elements of the Company’s goodwill. The parties acknowledge that Employee owes the Company a fiduciary duty to conduct all affairs of the Company in accordance with all applicable laws and the highest standards of good faith, trust, confidence and candor, and to endeavor, to the best of Employee’s ability, to promote the best interests of the Company.

E. Conflict of Interest. Employee agrees that while employed by the Company, and except with the advance written consent of a duly authorized officer of the Company, Employee will not enter into, on behalf of the Company, or cause the Company or any of its affiliates to enter into, directly or indirectly, any transactions with any business organization in which Employee or any member of Employee’s immediate family may be interested as a shareholder, partner, member, trustee, director, officer, employee, consultant, lender or guarantor or otherwise; provided, however, that nothing in this Agreement shall restrict transactions between the Company and any company whose stock is listed on a national securities exchange or actively traded in the over-the-counter market and over which Employee does not have the ability to control or significantly influence policy decisions.

2. COMPENSATION.

A. Base Pay. During the Employee’s employment, the Company agrees to pay Employee gross annual compensation of \$200,000.00, less usual and customary withholdings, which shall be payable in arrears in accordance with the Company’s customary payroll practices. In addition, Employee shall be eligible to receive bonus compensation in amounts to be determined by the Company’s Compensation Committee of the Board of Directors.

B. Benefits. During Employee's employment, Employee shall be eligible to participate in the Company's benefits programs, if any, as summarized and as governed by any plan documents concerning such benefits.

3. **CONFIDENTIAL INFORMATION.**

A. Company Information. The Company (including its affiliates, related entities, parent companies, subsidiaries, and successor entities) possesses and will continue to possess information, whether written or verbal, or in any other medium or expression, which has value and is treated by the Company as confidential ("Confidential Information"). Confidential Information may be written, stored in a computer, merged with other information, or simply memorized. Just because it is memorized, however, does not in any way reduce its confidentiality or its proprietary nature. While some of the Confidential Information may be in the public domain, its compilation in a form useful to the Company makes it unique and valuable. Confidential Information may include information created, discovered or developed by Employee during the period of or arising out of Employee's employment by the Company, whether before or after the Effective Date of this Agreement. Confidential Information also may include any Company proprietary information, technical data, trade secrets or know-how; information concerning the Company's past, current or prospective customers (including but not limited to lists, names, addresses, phone numbers, purchase history, accounts receivable concerning Company customers, customer preferences, and other financial information); information concerning the Company's personnel, consultants, vendors, contractors, or other affiliates of the Company; financial information, projections, forecasts, budgets, sales and marketing strategies and information, research, pricing information and strategies, inventions, improvements and other intellectual property; products, systems, seminars, programs, procedures, manuals, guides, confidential reports, forecasts, designs, processes, formulae, communications, equipment, Rolodexes, business card files, computer discs or other digital media, video tapes, files, proposals, lists, correspondence, letters, notes, notebooks, reports, memoranda and other documents; fax, voice-mail and e-mail messages generated, received or transmitted through the use of the Company's computer and/or telecommunications equipment; software or related code; new product design, search engine optimization, software design and development; and any other confidential information obtained during Employee's employment or affiliation with the Company.

B. Nondisclosure of Company Information. At all times, both during Employee's employment by the Company and thereafter, Employee shall keep in the strictest confidence and trust all Confidential Information. Employee may use Confidential Information as required in the performance of Employee's duties for the Company, so long as (i) any disclosure that may occur in connection with the performance of Employee's duties occurs only on a "need to know" basis, (ii) any such use is only for the benefit of the Company, and (iii) any such use will not result in any detriment or harm to the Company or its ability to maintain the information as Confidential or as a trade secret. Other than as expressly provided in this Agreement, Employee shall not directly or indirectly, in one or a series of transactions, disclose or reveal to any person or organization, or use, divulge, publish, report, transfer, or otherwise exploit for his/her own or anyone's else's benefit any of the Confidential Information without the express written consent of an authorized representative of the Company.

C. Duty to Safeguard Company Information. Employee shall take all reasonable safeguards to prevent unauthorized disclosure, replication or reproduction of Confidential Information and shall not permit any person or entity to photocopy, transcribe, or otherwise reproduce or disclose Confidential Information without the express written authorization of the Company. To the extent any such authorized disclosure or use of the Confidential Information occurs, Employee shall inform all recipients of such information that the Confidential Information is confidential and proprietary to the Company. Employee shall affix, or shall cause to be fixed, appropriate notices or warnings to all such physical expressions of Confidential Information describing the Company's proprietary rights thereto. Employee shall (i) notify the Company immediately of any unauthorized possession, use or knowledge of the Confidential Information, (ii) promptly furnish full details of such possession, use or knowledge to the Company, and (iii) cooperate with the Company in any litigation concerning such unauthorized possession, use or knowledge as may be deemed necessary by the Company to protect its proprietary rights in the Confidential Information. Except as may be expressly authorized by the Company or as is consistent with Employee's obligations with respect to the Confidential Information as set forth in this Agreement, Employee shall not (i) develop any product or service that is based in whole or in part on the Confidential Information, or (ii) modify, translate, reverse engineer, decompile, disassemble, create derivative works based on, or copy the Confidential Information or any portion thereof.

D. Third-Party Information. Employee recognizes that the Company has received, and in the future may receive, from third parties their confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for certain limited purposes. Employee agrees to hold such confidential or proprietary information in the strictest confidence and not to disclose it to any person, other employees or another entity or to use it except as necessary in carrying out Employee's work for the Company consistent with the Company's agreement with such third party.

E. Non-Confidential Information. The obligations of Employee set forth in Section 3 of this Agreement shall not apply to information which (i) is generally known to the public, or which may later become generally known to the public, except where such knowledge is the result of an unauthorized disclosure by Employee or another person or entity; (ii) is lawfully and in good faith made available to Employee by a third party who, to Employee's knowledge after inquiry, did not derive it from the Company and who imposed no obligation of confidence on Employee; (iii) is developed by Employee independent of any Confidential Information owned by the Company, as verified and evidenced by the prior written records of Employee; or (iv) is required to be disclosed in a judicial or administrative proceeding, or is otherwise required to be disclosed by law, in any such case after all reasonable legal remedies for maintaining such information in confidence have been exhausted, including, but not limited to, giving the Company as much advance notice of the possibility of such disclosure as practical so that the Company may attempt to stop such disclosure or obtain a protective order concerning such disclosure. Employee shall provide the Company with written notice no less than ten (10) business days prior to the disclosure of any Confidential Information that may be required by law. For the purpose of this Section, a specific item of Confidential Information shall not be deemed to be within the foregoing exceptions merely because it is embraced by more general information in the public domain or in the possession of Employee. In addition, any combination of features shall not be deemed to be within the foregoing exceptions merely because individual features are in the public domain or in the possession of Employee, but only if the combination itself is in the public domain or in the possession of Employee. If Employee is not sure whether certain information is Confidential Information, Employee shall treat that information as Confidential unless Employee is informed by the Company in writing to the contrary.

4. **COVENANT NOT TO COMPETE.**

A. Noncompetition Covenant. Employee agrees that during the Restricted Period (as defined below), Employee shall not, directly or indirectly within the Territory (as defined below): (i) personally, by agency, as an employee, independent contractor, consultant, officer, director, manager, agent, associate, investor, or by any other artifice or device, engage in any Competitive Business (as defined below), (ii) assist others, including but not limited to employees of the Company, to engage in any Competitive Business, or (iii) own, purchase, finance, organize or take preparatory steps to own, purchase, finance, or organize a Competitive Business.

B. Definitions.

1. "Competitive Business" means (i) any person, entity or organization which is engaged in or about to become engaged in research on, consulting regarding, or development, production, marketing or selling of any product, process, technology, device, invention or service which resembles, competes with or is intended to resemble or compete with a product, process, technology, device, invention or service of the Company; or (ii) any other line of business that was conducted or proposed to be conducted by the Company or any affiliate, successor or related entity at any time during the term of Employee's employment with the Company.

2. "Territory" means the territory(ies) to which Employee was assigned during Employee's employment with the Company.

3. "Restricted Period" means the period of Employee's employment with the Company and for eighteen (18) months immediately following the cessation of his/her employment (regardless of the reason or circumstances of that separation of employment) with the Company.

5. **NON-SOLICITATION AND NON-INTERFERENCE COVENANTS.**

A. Nonsolicitation of Employees and Others. During the Restricted Period, Employee shall not, directly or indirectly, solicit, recruit, or induce, or attempt to solicit, recruit or induce any employee, consultant, independent contractor, vendor, supplier, or agent to (a) terminate or otherwise adversely affect his or her employment or other business relationship (or prospective employment or business relationship) with the Company, or (b) work for Employee or any other person or entity, other than the Company or its affiliates or related entities.

B. Nonsolicitation of Customers. During the Restricted Period, Employee shall not, directly or indirectly, solicit, recruit, or induce any Customer (as defined below) for the purpose of (i) providing any goods or services related to a Competitive Business, or (ii) interfering with or otherwise adversely affecting the contracts or relationships, or prospective contracts or relationships, between the Company (including any related or affiliated entities) and such Customers. "Customer" means a person or entity with which Employee had contact or about whom Employee gained information while an Employee of the Company, and to which the Company was selling or providing products or services, was in active negotiations for the sale of its products or services, or was otherwise doing business as of the date of the cessation of Employee's employment with the Company or for whom the Company had otherwise done business within the twelve (12) month period immediately preceding the cessation of Employee's employment with the Company.

6. **ACKNOWLEDGEMENTS.** Employee acknowledges and agrees that:

A. The geographic and duration restrictions contained in Sections 4 and 5 of this Agreement are fair, reasonable, and necessary to protect the Company's legitimate business interests and trade secrets, given the geographic scope of the Company's business operations, the competitive nature of the Company's business, and the nature of Employee's position with the Company;

B. Employee's employment creates a relationship of confidence and trust between Employee and the Company with respect to the Confidential Information, and Employee will have access to Confidential Information (including but not limited to trade secrets) that would be valuable or useful to the Company's competitors;

C. The Company's Confidential Information is a valuable asset of the Company, and any violation of the restrictions set forth in this Agreement would cause substantial injury to the Company;

D. The restrictions contained in this Agreement will not unreasonably impair or infringe upon Employee's right to work or earn a living after Employee's employment with the Company ends, but Employee is prepared for the possibility that his/her standard of living may be reduced during the Restricted Period and assumes and accepts any risk associated with that possibility;

E. Employee is aware of and understands the following provisions of Colorado law, set forth in Colorado Revised Statutes § 8-2-113(2), which states, in pertinent part:

Any covenant not to compete which restricts the right of any person to receive compensation for performance of skilled or unskilled labor for any employer shall be void, but this subsection (2) shall not apply to: . . .

Any contract for the protection of trade secrets; . . . [and]

Executive and management personnel and officers and employees who constitute professional staff to executive and management personnel.

F. This Agreement is a contract for the protection of trade secrets under applicable law and is intended to protect the Confidential Information (including trade secrets) identified above; and

7. **"BLUE PENCIL" AND SEVERABILITY PROVISION.** If a court of competent jurisdiction declares any provision of this Agreement invalid, void, voidable, or unenforceable, the court shall reform such provision(s) to render the provision(s) enforceable, but only to the extent absolutely necessary to render the provision(s) enforceable and only in view of the Parties' express desire that the Company be protected to the greatest possible extent under applicable law from improper competition and the misuse or disclosure of trade secrets and Confidential Information. To the extent such a provision (or portion thereof) may not be reformed so as to make it enforceable, it may be severed and the remaining provisions shall remain fully enforceable.

8. INVENTIONS.

A. Inventions Retained and Licensed. Attached as Exhibit A is a list describing all inventions and information created, discovered or developed by Employee, whether or not patentable or registrable under patent, copyright or similar statutes, made or conceived or reduced to practice or learned by Employee, either alone or with others before Employee's employment with the Company ("Prior Inventions"), which belong in whole or in part to Employee, and which are not being assigned by Employee to the Company. Employee represents that Exhibit A is complete and contains no confidential or proprietary information belonging to a person or entity other than Employee. Employee acknowledges and agrees that Employee has no rights in any Inventions (as that term is defined below) other than the Prior Inventions listed on Exhibit A. If there is nothing identified on Exhibit A, Employee represents that there are no Prior Inventions as of the time of signing this Agreement. Employee shall not incorporate, or permit to be incorporated, any Prior Invention owned by Employee or in which he/she has an interest in a Company product, process or machine without the Company's prior written consent. Notwithstanding the foregoing, if, in the course of Employee's employment with the Company, Employee directly or indirectly incorporates into a Company product, process or machine a Prior Invention owned by Employee or in which Employee has an interest, the Company is hereby granted and shall have a non-exclusive, royalty-free, irrevocable, perpetual, world-wide license to make, have made, modify, use, create derivative works from and sell such Prior Invention as part of or in connection with such product, process or machine.

B. Assignment Of Inventions. Employee shall promptly make full, written disclosure to the Company, will hold in trust for the sole right and benefit of the Company, and hereby irrevocably transfers and assigns, and agrees to transfer and assign, to the Company, or its designee, all his/her right, title and interest in and to any and all inventions, original works of authorship, developments, concepts, improvements, designs, discoveries, ideas, trademarks (and all associated goodwill), mask works, or trade secrets, whether or not they may be patented or registered under copyright or similar laws, which Employee may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, during Employee's employment by the Company (the "Inventions"). Employee further acknowledges that all original works of authorship which are made by Employee (solely or jointly with others) within the scope of and during the period of his/her employment with the Company and which may be protected by copyright are "Works Made For Hire" as that term is defined by the United States Copyright Act. Employee understands and agrees that the decision whether to commercialize or market any Invention developed by Employee solely or jointly with others is within the Company's sole discretion and the Company's sole benefit and that no royalty will be due to Employee as a result of the Company's efforts to commercialize or market any such invention.

Employee recognizes that Inventions relating to his or her activities while working for the Company and conceived or made by Employee, whether alone or with others, within one (1) year after cessation of Employee's employment, may have been conceived in significant part while employed by the Company. Accordingly, Employee acknowledges and agrees that such Inventions shall be presumed to have been conceived during Employee's employment with the Company and are to be, and hereby are, assigned to the Company unless and until Employee has established the contrary.

C. Maintenance of Records. Employee agrees to keep and maintain adequate and current written records of all Inventions made by Employee (solely or jointly with others) during his/her employment with the Company. The records will be in the form of notes, sketches, drawings and any other format that may be specified by the Company. The records will be available to and remain the sole property of the Company at all times.

D. Patent, Trademark and Copyright Registrations. Employee agrees to assist the Company, or its designee, at the Company's expense, in every proper way to secure the Company's rights in the Inventions and any copyrights, patents, trademarks, service marks, mask works, or any other intellectual property rights in any and all countries relating thereto, including, but not limited to, the disclosure to the Company of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments and all other instruments the Company deems necessary in order to apply for and obtain such rights and in order to assign and convey to the Company, its successors, assigns, and nominees the sole and exclusive rights, title, and interest in and to such inventions, and any copyrights, patents, trademarks, service marks, mask works, or any other intellectual property rights relating thereto. Employee further agrees that his/her obligation to execute or cause to be executed, when it is in his/her power to do so, any such instrument or paper shall continue after termination or expiration of this Agreement or the cessation of his/her employment with the Company. If the Company is unable because of Employee's mental or physical incapacity or for any other reason to secure Employee's signature to apply for or to pursue any application for any United States or foreign patents, trademarks or copyright registrations covering inventions or original works of authorship assigned to the Company as above, then Employee hereby irrevocably designates and appoints the Company and its duly authorized officers and agents as Employee's agent and attorney-in-fact to act for and in his/her behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the prosecution and issuance of letters, patent, trade marks or copyright registrations thereon with the same legal force and effect as if executed by Employee; this power of attorney shall be a durable power of attorney which shall come into existence upon Employee's mental or physical incapacity.

9. SURVIVAL AND REMEDIES. Employee's obligations of nondisclosure, nonsolicitation, noninterference, and noncompetition under this Agreement shall survive the cessation of Employee's employment with the Company and shall remain enforceable. In addition, Employee acknowledges that upon a breach or threatened breach of any obligation of nondisclosure, nonsolicitation, noninterference, or noncompetition of this Agreement, the Company will suffer irreparable harm and damage for which money alone cannot fully compensate the Company. Employee therefore agrees that upon such breach or threat of imminent breach of any such obligation, the Company shall be entitled to seek a temporary restraining order, preliminary injunction, permanent injunction or other injunctive relief, without posting any bond or other security, barring Employee from violating any such provision. This Section shall not be construed as an election of any remedy, or as a waiver of any right available to the Company under this Agreement or the law, including the right to seek damages from Employee for a breach of any provision of this Agreement and the right to require Employee to account for and pay over to the Company all profits or other benefits derived or received by the Employee as the result of such a breach, nor shall this Section be construed to limit the rights or remedies available under Colorado law for any violation of any provision of this Agreement.

10. RETURN OF COMPANY PROPERTY. All devices, records, reports, data, notes, compilations, lists, proposals, correspondence, specifications, equipment, drawings, blueprints, manuals, DayTimers, planners, calendars, schedules, discs, data tapes, financial plans and information, or other recorded matter, whether in hard copy, magnetic media or otherwise (including all copies or reproductions made or maintained, whether on the Company's premises or otherwise), pertaining to Employee's work for the Company, or relating to the Company or the Company's Confidential Information, whether created or developed by the Employee alone or jointly during his/her employment with the Company, are the exclusive property of the Company. Employee shall surrender the same (as well as any other property of the Company) to the Company upon its request or promptly upon the cessation of employment. Upon the separation of Employee's employment, he/she agrees to sign and deliver the "Termination Certificate" attached as Exhibit B, which shall detail all Company property that is surrendered upon separation of employment.

11. SETOFF. Employee agrees that, in addition to any other rights that the Company may have, the Company shall have the right to set off against any commission payment or paycheck, including Employee's final paycheck, the amount of any interim or final payment due to Employee, the amount of any loans, advances, goods or services, and equipment or property provided by the Company to Employee; any amounts necessary to cover the replacement cost of a shortage due to theft by Employee; and any deduction that is authorized by Employee if the authorization is revocable, including but not limited to deductions for hospitalization and medical insurance, other insurance, savings plans, stock purchases, voluntary pension plans, charities, and deposits to financial institutions. This Agreement shall constitute a valid written agreement for the purposes of Colorado Revised Statutes § 8-4-105 and a valid compensation agreement for the purposes of Colorado Revised Statutes § 8-4-109(2).

12. NO CONFLICTING AGREEMENTS OR IMPROPER USE OF THIRD-PARTY INFORMATION. During her/his employment with the Company, Employee shall not improperly use or disclose any proprietary information or trade secrets of any former employer or other person or entity, and Employee shall not bring on to the premises of the Company any unpublished document or proprietary information belonging to any such former employer, person or entity, unless consented to in writing by the former employer, person or entity. Employee represents that he/she has not improperly used or disclosed any proprietary information or trade secrets of any other person or entity during the application process or while employed or affiliated with the Company. Employee also acknowledges and agrees that he/she is not subject to any contract, agreement, or understanding that would prevent Employee from performing his/her duties for the Company or otherwise complying with this Agreement. To the extent Employee violates this provision, or his/her employment with the Company constitutes a breach or threatened breach of any contract, agreement, or obligation to any third party, Employee shall indemnify and hold the Company harmless from all damages, expenses, costs (including reasonable attorneys' fees) and liabilities incurred in connection with, or resulting from, any such violation or threatened violation.

13. DUTY TO DISCLOSE SUBSEQUENT EMPLOYMENT. During the Restricted Period, Employee shall promptly provide the Company with written notice identifying Employee's new employer (or third party or entity for whom Employee might be performing services), and shall provide a general description in reasonable detail of Employee's duties and responsibilities sufficient to inform the Company of whether there is a breach of this Agreement or a need to request a court order to enforce the restrictive covenants contained in this Agreement. During the Restricted Period, Employee shall notify his/her new employer (or person or entity for whom Employee provides goods or services) about Employee's non-disclosure, non-solicitation, non-interference, and non-competition obligations under this Agreement.

14. GENERAL PROVISIONS.

A. Governing Law; Consent To Personal Jurisdiction. The laws of the State of Colorado govern this Agreement without regard to conflict of laws principles. Employee hereby consents to the personal jurisdiction of the state and federal courts located in the State of Colorado for any legal proceeding concerning the Employee's employment or termination of employment, or arising from or related to this Agreement or any other agreement executed between the Employee and the Company. Should an action be brought to enforce the terms of this Agreement, the Company shall be entitled to recover reasonable attorneys' fees and costs incurred in prosecuting the action.

B. Entire Agreement. This Agreement sets forth this entire Agreement between the Company (and any of its related or affiliated entities, officers, agents, owners or representatives) and the Employee relating to the subject matter herein, and supersedes any and all prior discussions and agreements, whether written or oral, on the subject matter hereof. To the extent that this Agreement may conflict with the terms of another written agreement between the Employee and the Company, the terms of this Agreement will control.

C. Modification. No modification of or amendment to this Agreement will be effective unless in writing and signed by Employee and an authorized representative of the Company.

D. Waiver. The Company's failure to enforce any provision of this Agreement shall not act as a waiver of its ability to enforce that provision or any other provision. The Company's failure to enforce any breach of this Agreement shall not act as a waiver of that breach or any future breach. No waiver of any of the Company's rights under this Agreement will be effective unless in writing. Any such written waiver shall not be deemed a continuing waiver unless specifically stated, and shall operate only as to the specific term or condition waived and shall not constitute a waiver of such term or condition for the future or as to any act other than that specifically waived.

E. Successors and Assigns. This Agreement shall be assignable to, and shall inure to the benefit of, the Company's successors and assigns. Employee shall not have the right to assign his/her rights or obligations under this Agreement.

F. Construction. The language used in this Agreement will be deemed to be language chosen by the Employee and the Company to express their mutual intent, and no rules of strict construction will be applied against either party.

G. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be enforceable, and all of which together shall constitute one agreement. Signatures of the Parties that are transmitted in person or by facsimile or e-mail shall be accepted as originals.

H. Further Assurances. Employee agrees to execute any proper oath or verify any document required to carry out the terms of this Agreement.

I. Title and Headings. The titles, captions and headings of this Agreement are included for ease of reference only and will be disregarded in interpreting or construing this Agreement.

J. Notices. All notices and communications that are required or permitted to be given under this Agreement shall be in writing and shall be sufficient in all respects if given and delivered in person, by electronic mail, by facsimile, by overnight courier, or by certified mail, postage prepaid, return receipt requested, to the receiving party at the addresses shown on the signature blocks below or to such other address as such party may have given to the other by notice pursuant to this Section. Notice shall be deemed given (i) on the date of delivery in the case of personal delivery, electronic mail or facsimile, or (ii) on the delivery or refusal date as specified on the return receipt in the case of certified mail or on the tracking report in the case of overnight courier.

15. EMPLOYEE'S ACKNOWLEDGMENTS. Employee acknowledges that he/she is executing this Agreement voluntarily and without duress or undue influence by the Company or anyone else, and that Employee has carefully read this Agreement and fully understands the terms, consequences, and binding effect of this Agreement.

EMPLOYEE

BACTERIN INTERNATIONAL, INC.

Print Name: Gregory A. Juda

Signature: /s/ Gregory A. Juda By: /s/ Guy Cook

Date: 3/22/2012 Name: Guy Cook

Address: 61532 Hillridge Road, Bend, OR 97702 Title: CEO

Phone: 406-579-5120

Email: gjuda@bacterin.com

EXHIBIT A
LIST OF PRIOR INVENTIONS AND ORIGINAL WORKS OF AUTHORSHIP

IS A LIST ATTACHED? (PLEASE MARK): YES NO

NOTE: The following is a list of all Prior Inventions made, conceived, developed or reduced to practice by Employee prior to his/her employment with the Company. IF NO SUCH LIST IS ATTACHED, THAT MEANS EMPLOYEE IS NOT ASSERTING THE EXISTENCE OF ANY PRIOR INVENTIONS.

EXHIBIT B

TERMINATION CERTIFICATE

By signing below, I represent that I have returned all company property in my possession, custody and control, regardless of the form or format of any such property, and that I have not retained any originals or copies of any information belonging to the company. I understand that company property includes, but is not limited to, documents, copies, electronic information, e-mails, equipment, keys, passwords, access codes, and any other property or information belonging to the company (as described more fully in paragraph 10 of the attached Agreement).

I also represent that on or before my last day, I have specifically returned the following items:

- Computer/laptop
- Keys/access cards
- Company credit card
- Other equipment (please list) _____

- Other information (please list) _____

NAME: _____

SIGNATURE: _____

DATE: _____

Option Number # _____

BACTERIN INTERNATIONAL EQUITY INCENTIVE PLAN

STOCK OPTION AGREEMENT

This Agreement between Bacterin International Holdings, Inc. (the "Plan Sponsor") and _____ (the "Option Holder") shall be effective as of the Grant Date. The Plan Sponsor and Option Holder agree as follows:

- 1. **Grant of Option.** Option Holder is hereby granted a Nonqualified Stock Option (the "Option") to purchase Stock of the Plan Sponsor pursuant to the Amended and Restated Bacterin International Equity Incentive Plan (the "Plan"). The Option is not intended to qualify as an Incentive Stock Option within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended. The Option and this Agreement are subject to and shall be construed in accordance with the terms and conditions of the Plan, as now or hereinafter in effect. Any terms which are used in this Agreement without being defined and which are defined in the Plan shall have the meaning specified in the Plan.
- 2. **Date of Grant.** The date of the grant of the Option is _____, which was the third trading day following the Company's ___ quarter 201__ earnings release (the "Grant Date").
- 3. **Number and Price of Shares.** The number of shares as to which the Option is granted is _____ (_____). The purchase price per share is \$_____, which was the closing price on the trading day preceding the grant date.
- 4. **Vesting.** The Option granted hereby shall become vested in and exercisable by Option Holder as set forth in the following schedule:

| Date _____ | Number of Shares <u>Which Become Exercisable</u> |
|------------|---|
|------------|---|

In order to be eligible to exercise the Option in accordance with the vesting schedule, the Option Holder must have been continuously employed by the Company from the Grant Date of the Option until the date specified in the vesting schedule.

Acceleration of Exercisability. Upon a Change in Control of the Plan Sponsor, then (i) the entire Option shall immediately be 100% vested without regard to the schedule contained in this Option Agreement and (ii) the entire Option shall become immediately exercisable in full during its remaining term. The Option Holder may exercise the Option at any time immediately after or concurrently with the Change in Control regardless of whether all conditions of exercise have been satisfied.

- 5. **Legends.** Certificates representing Stock acquired upon exercise of this Option may contain such legends and transfer restrictions as the Plan Sponsor shall deem reasonably necessary or desirable, including, without limitation, legends restricting transfer of the Stock until there has been compliance with federal and state securities laws.

Stock Option Agreement with _____

DATE: _____

Option Number # _____

6. **Receipt of Plan.** By entering into this Agreement, Option Holder acknowledges (i) that he or she has received and read a copy of the Plan and (ii) that this Agreement is subject to and shall be construed in accordance with the terms and conditions of the Plan, as now or hereinafter in effect. By entering into this Agreement, Option Holder further acknowledges that all grants of Options are determined by the Committee in its sole discretion and that nothing contained in the Plan or in any grant under the Plan shall confer a right or entitlement to receive any further grants in the future.

IN WITNESS WHEREOF, the Plan Sponsor, by a duly authorized officer of the Plan Sponsor, and Option Holder have executed this Agreement, effective as of the date of grant.

BACTERIN INTERNATIONAL HOLDINGS, INC.

Plan Sponsor

By: _____

Title: _____

Date: _____

OPTION HOLDER

By: _____

Date: _____

Address: _____

Stock Option Agreement with _____

DATE: _____

Certification of Chief Executive Officer

I, Guy Cook, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Bacterin International Holdings, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting standards;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 4, 2012

/s/ Guy Cook

Guy Cook

Chief Executive Officer

Certification of Chief Financial Officer

I, John P. Gandolfo, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Bacterin International Holdings, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting standards;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: May 4, 2012

/s/ John P. Gandolfo

John P. Gandolfo
Chief Financial Officer

Section 1350 Certification of Chief Executive Officer

In connection with the Quarterly Report on Form 10-Q of Bacterin International Holdings, Inc. (the "Company") for the quarterly period ended March 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Guy Cook, Chief Executive Officer of the Company, certify, to the best of my knowledge and belief, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a) or 78o(d)); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Guy Cook

Guy Cook
Chief Executive Officer
May 4, 2012

Section 1350 Certification of Chief Financial Officer

In connection with the Quarterly Report on Form 10-Q of Bacterin International Holdings, Inc. (the "Company") for the quarterly period ended March 31, 2012 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John P. Gandolfo, Chief Financial Officer of the Company, certify, to the best of my knowledge and belief, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m(a) or 78o(d)); and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ John P. Gandolfo

John P. Gandolfo

Chief Financial Officer

May 4, 2012
