

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT PURSUANT
TO SECTION 13 OR 15(D) OF THE
SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): May 3, 2012

Bacterin International Holdings, Inc.

(Exact Name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

001-34951

(Commission File Number)

20-5313323

(IRS Employer Identification No.)

600 Cruiser Lane
Belgrade, Montana

(Address of Principal Executive Offices)

59714

(Zip Code)

(406) 388-0480

(Registrant's Telephone Number, Including Area Code)

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

ITEM 1.02. TERMINATION OF A MATERIAL DEFINITIVE AGREEMENT

Earlier today, we provided Lincoln Park Capital Fund, LLC ("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. There are no early termination penalties, however, certain provisions in the Purchase Agreement survive termination, as more fully described in the Purchase Agreement, which was attached as an Exhibit to our Form 8-K filed with the SEC on May 31, 2011. The notice of termination is attached as Exhibit 10.15 to this Form 8-K and incorporated by reference herein.

ITEM 2.02. RESULTS OF OPERATIONS AND FINANCIAL CONDITION

We are furnishing this Item 2.02 in connection with the disclosure of information, in the form of the textual information from a press release on May 3, 2012 entitled "Bacterin Announces First Quarter 2012 Revenue of \$7.8 Million, Up 29% Year-over-Year, on Gross Margins of 76%, and 34% Reduction in Operating Loss" and filed as Exhibit 99.1 hereto.

The information in this Item 2.02 (including Exhibit 99.1 hereto) is being furnished pursuant to Item 2.02 and shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section.

We do not have, and expressly disclaim, any obligation to release publicly any updates or any changes in our expectations or any change in events, conditions, or circumstances on which any forward-looking statement is based.

The text included with this report is available on our website located at www.bacterin.com, however the contents of our website are not incorporated by reference herein.

This Form 8-K contains forward-looking statements that are subject to various assumptions, risks and uncertainties. These forward-looking statements may include financial projections, revenue and earnings guidance and other statements or assumptions regarding our expectations and beliefs. The Company believes that its expectations, as expressed in these statements are based on reasonable assumptions regarding the risks and uncertainties inherent in achieving those expectations. These statements are not, however, guarantees of performance and actual results may differ materially. Risks and uncertainties which may cause actual results to be different than expressed or implied in our forward-looking statements include, but are not limited to, the risk factors described under the heading "Risk Factors" in our Annual Report on Form 10-K. The Company expressly disclaims any current intention to update any forward-looking statements as a result of new information or future events or developments.

ITEM 9.01. FINANCIAL STATEMENTS AND EXHIBITS

- (d) Exhibits.
 - 10.15 Notice of Termination of Purchase Agreement with Lincoln Park Capital Fund, LLC
 - 99.1 Press Release dated May 3, 2012 entitled "Bacterin Announces First Quarter 2012 Revenue of \$7.8 Million, Up 29% Year-over-Year, on Gross Margins of 76%, and 34% Reduction in Operating Loss"
-

SIGNATURE

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 hereunto duly authorized.

Dated: May 3, 2012

BACTERIN INTERNATIONAL HOLDINGS, INC.

By: /s/ Guy S. Cook

Name: Guy S. Cook

Title: President and Chief Executive Officer

EXHIBIT INDEX

- 10.15 Notice of Termination of Purchase Agreement with Lincoln Park Capital Fund, LLC
- 99.1 Press Release of Bacterin International Holdings, Inc. dated May 3, 2012 entitled “Bacterin Announces First Quarter 2012 Revenue of \$7.8 Million, Up 29% Year-over-Year, on Gross Margins of 76%, and 34% Reduction in Operating Loss”
-



May 3, 2012

Lincoln Park Capital Fund, LLC
440 North Wells, Suite 620
Chicago, IL 60654
Attn: Josh Scheinfeld/Jonathan Cope

RE: Company Termination Notice Pursuant to Section 11(d) of the Purchase Agreement

Dear Josh & Jonathan:

Pursuant to Section 11(d) of our Purchase Agreement dated May 27, 2011, we are electing to terminate our Purchase Agreement by providing you with this Company Termination Notice dated May 3, 2012.

Very truly yours,

Bacterin International Holdings, Inc.

/s/ Guy Cook, CEO

By: Guy Cook, CEO

Bacterin Announces First Quarter 2012 Revenue of \$7.8 Million, Up 29% Year-over-Year, on Gross Margins of 76%, and 34% Reduction in Operating Loss

Conference Call at 4:30pm ET to Discuss First Quarter 2012 Results

BELGRADE, Mont. May 3, 2012 - Bacterin International Holdings, Inc. (NYSE Amex: BONE), a leader in the development of revolutionary bone graft material and antimicrobial coatings for medical applications, today announced its financial results for the first quarter ended March 31, 2012:

2012 Highlights:

- Revenue increased 29% to \$7.8 million, compared to the \$6.0 million for the first quarter of 2011.
 - Operating loss decreased by 34% to \$1.3 million, compared to an operating loss of \$1.9 million in the first quarter of 2011.
 - Gross Margin was 76%, above the previous guidance of 70 to 75%, and compared to 83.5% in the first quarter of 2011
 - Inventory increased to \$11.4 million, sequentially compared to \$9.4 million in fourth quarter of 2011 as a result of the increase in the receipt of donor inventory and increased production efficiency.
 - April 4, 2012, a peer review article in Orthopedic Research and Reviews determined OsteoSponge® exhibits ideal properties for bone regeneration, similar to those of autograft (graft of patient's own bone) with a distinct advantage over autograft, in that there is no risk of complications at the harvest site or donor pain postoperatively.
 - Recent studies conducted at the Hospital for Special Surgery have shown the OsteoSelect DBM putty proved equivalent to autologous bone graft in the posterolateral intertransverse rabbit model.
 - On April 23, 2012, the Company secured an accounts receivable credit facility with Midcap Financial LLC and Silicon Valley Bank for up to \$5 million through January 1, 2015 based upon a predetermined formula for borrowings of up to 80% of Bacterin's eligible accounts receivable, as defined in the credit and security agreement.
 - Secured third national GPO contract, a three-year agreement with a leading health care supply chain expertise and contracting company, to provide OsteoSponge®, OsteoSelect® DBM Putty, OsteoWrap®, OsteoLock®, BacFast®, hMatrix®, Sports Medicine Allografts, and traditional allografts to the GPO's nationwide network of hospitals and medical practices.
-

Hospital accounts in the 1Q of 2012 increased to 756 facilities, an increase of 45% over 519 facilities in Q1 2011.

Management Commentary

“First quarter revenue was lower than anticipated, with 6 of our top 10 SKUs on backorder much of the first quarter. We have substantially increased the receipt of donor inventory as well as production but don’t believe it will have a positive impact on revenues until the third quarter of 2012,” said Guy Cook, Chairman and CEO of Bacterin. “We are confident we have overcome the short term production issues, however, when our sales force is faced with limited access to products, it slows surgeon uptake when the product finally does become available. Typically, surgeons who currently use the product continue to reorder, but to convert new surgeons, each new surgeon needs to be approached, use the product in 1 or 2 cases, wait 60-90 days to see if they like the results, before using it in greater volume. When product is constrained and goes into back order, it delays the uptake, and the growth we’ve come to expect is pushed out by a few quarters. We are confident in our long term growth potential based upon our increased production and continuing demand for our products. We were able to sign up 140 new accounts by the end of the quarter, continuing to build our pipeline, but converting into meaningful recurring sales will take a little longer than we expected.”

“With respect to our hMatrix product, uptake in the wound care market was slower than expected due to reimbursement issues surrounding its use for the treatment of diabetic foot ulcers, which we believe will be corrected with the expected issuance of a Q code by January 1, 2013. To address this issue, we have shifted our manufacturing and marketing focus to address additional markets in sports medicine and reconstructive surgery that we expect will drive higher sales over the last 3 quarters of 2012.”

“A preclinical study recently completed at Hospital for Special Surgery on our OsteoSelect DBM putty is expected to be a significant driver of sales in the remainder of 2012 and 2013. OsteoSelect DBM putty proved equivalent to autologous bone graft, which is the current gold standard for spinal fusion, in the posterolateral intertransverse rabbit model.

We are also expecting data on our coatings in the second half of this year, as well as independent data on OsteoSponge SC.”

Q1 2012 Financial Results

Revenue for the quarter was a \$7.8 million compared to \$9.1 million in the previous quarter and an increase of 29% compared to \$6.0 million in the first quarter of 2011. Excluding the \$1.4 million stocking order sale in the fourth quarter of 2011, revenues increased slightly from \$7.7 million to \$7.8 million on a sequential basis. The year over year increase was largely the result of increased sales generated from the Company’s direct sales force and independent distributors compared to the first quarter of 2011.

Costs of tissue sales consist primarily of tissue and medical device manufacturing costs. Costs of sales increased by 88% or \$871,366 to \$1.86 million 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. 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.

Gross profit margin for the quarter was 76%, as compared to 44% in the previous quarter and 84% in the year-ago quarter. The fourth quarter 2011 gross margin figure was negatively impacted by approximately \$1.2 million of nonrecurring charges as well as a lower gross margin on a \$1.4 million stocking order sale due to a large volume pricing discount.

Operating expenses for the quarter totaled \$7.2 million, as compared to \$6.7 million in the previous quarter, and \$6.9 million in the first quarter of 2011. Operating loss for the quarter was \$1.3 million, compared to \$2.7 million in the previous quarter, and \$1.9 million in the first quarter of 2011. Net loss was \$1.0 million or \$(0.03) per basic share for the quarter. This compares to a net loss of \$4.4 million or \$(0.11) per basic share in the previous quarter, and net income in first quarter of 2011 of \$4.9 million or \$0.13 per basic share.

EBITDA for the quarter totaled a loss of \$541,000, compared an EBITDA loss of \$1.5 million for the previous quarter, and an EBITDA loss of \$1.2 million for the first quarter of 2011.

Cash and cash equivalents and net accounts receivable was \$9.0 million at March 31, 2012, compared to a total of \$7.8 million at December 31, 2012.

“We have added a second production shift and, later in the year, will be expanding the number of clean rooms we devote to high demand products to a total of 13. Our plan is to optimize production to process less SKUs with a higher concentration of our high demand products, and expect processing capacity to double from current levels by the end of the year” said Mr. Cook. “In addition, we are also ramping up our donor inventory levels to eventually support \$100 million of annual revenue. There is a lag time with processing throughput since it takes approximately 2-9 months to clear a donor due to related paperwork and laboratory testing results. We believe that product constraints are a short term issue we have resolved and that the future and long term opportunity for Bacterin products, in multi-billion dollar addressable markets, remain very strong.”

“Because our industry sells product on a consignment basis, we have poor visibility on reportable revenues until a few weeks after the close of a month which makes it extremely difficult to provide revenue guidance on a quarterly basis. Based upon production challenges in the fourth quarter of 2011; feedback from the field with respect to second quarter sales; our decision not to pursue stocking order sales of slow moving inventory included in prior revenue guidance as well as delays in revenues generated from our hMatrix, we feel it is prudent to revise guidance from our previously stated expectation of 2012 revenues of \$53 million -56 million down to \$35 million – 40 million.”

Conference Call Details:

Conference Call Details:

Date: Thursday, May 3, 2012
Time: 4:30 p.m. Eastern time (1:30 p.m. Pacific time)
Dial-In Number: 1-877-941-1429
International: 1-480-629-9857
Conference ID#: 4535021

The conference call will be broadcast simultaneously and available for replay here and at the investor section of the company's Web site at <http://www.bacterin.com/index.htm>.

Please call the conference telephone number 5-10 minutes prior to the start time. An operator will register your name and organization. If you have any difficulty connecting with the conference call, please contact Hayden IR at 1-646-755-7412.

A replay of the call will be available after 7:30 p.m. Eastern time on the same day and until June 3, 2012.

About the Presentation of EBITDA

EBITDA is not a financial measure calculated and presented in accordance with U.S. generally accepted accounting principles (GAAP) and should not be considered as an alternative to net income, operating income or any other financial measures so calculated and presented, nor as an alternative to cash flow from operating activities as a measure of liquidity. The company defines EBITDA as net income/(loss) from operations before depreciation, amortization and non-cash stock-based compensation. Other companies (including competitors) may define EBITDA differently. The company presents EBITDA because management believes it to be an important supplemental measure of performance that is commonly used by securities analysts, investors and other interested parties in the evaluation of companies in our industry. Management also uses this information internally for forecasting and budgeting. It may not be indicative of the historical operating results of Bacterin nor is it intended to be predictive of potential future results. Investors should not consider EBITDA in isolation or as a substitute for analysis of the company's results as reported under GAAP. See "GAAP to non-GAAP Reconciliation" below for further information on this non-GAAP measure.

Bacterin International Holdings, Inc.
Reconciliation of Net (Loss) Income From Operations to EBITDA
(Unaudited)

	Three months ended March 31, 2012	Three months ended March 31, 2011
Net loss from operations	(1,273,163)	(1,936,359)
Depreciation & Amortization	119,074	52,691
Allocated depreciation	94,486	94,486
Option compensation	190,055	381,199
Non cash stock compensation	328,253	240,991
EBITDA	(541,295)	(1,166,992)

About Bacterin International Holdings

Bacterin International Holdings, Inc. (NYSE Amex: BONE) develops, manufactures and markets biologics products to domestic and international markets. Bacterin's proprietary methods optimize the growth factors in human allografts to create the ideal stem cell scaffold to promote bone, subchondral repair and dermal growth. These products are used in a variety of applications including enhancing fusion in spine surgery, relief of back pain, promotion of bone growth in foot and ankle surgery, promotion of cranial healing following neurosurgery and subchondral repair in knee and other joint surgeries.

Bacterin's Medical Device division develops, employs, and licenses bioactive coatings for various medical device applications. Bacterin's strategic coating initiatives include antimicrobial coatings designed to inhibit biofilm formation and microbial contamination. For further information, please visit www.bacterin.com.

Important Cautions Regarding Forward-looking Statements

This news release contains certain disclosures that may be deemed forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to significant risks and uncertainties. Forward-looking statements include statements that are predictive in nature, that depend upon or refer to future events or conditions, or that include words such as "continue," "efforts," "expects," "anticipates," "intends," "plans," "believes," "estimates," "projects," "forecasts," "strategy," "will," "goal," "target," "prospects," "potential," "optimistic," "confident," "likely," "probable" or similar expressions or the negative thereof. Statements of historical fact also may be deemed to be forward-looking statements. We caution that these statements by their nature involve risks and uncertainties, and actual results may differ materially depending on a variety of important factors, including, among others: the Company's ability to launch beta and full product releases, the Company's ability to obtain FDA concurrence use for anti-microbial coatings in a timely manner; the Company's ability to meet its obligations under existing and anticipated contractual obligations; the Company's ability to develop, market, sell and distribute desirable applications, products and services and to protect its intellectual property; the ability of the Company's sales force to achieve expected results; the ability of the Company's customers to pay and the timeliness of such payments, particularly during recessionary periods; the Company's ability to obtain financing as and when needed; changes in consumer demands and preferences; the Company's ability to attract and retain management and employees with appropriate skills and expertise; the impact of changes in market, legal and regulatory conditions and in the applicable business environment, including actions of competitors; and other factors. Additional risk factors are listed in the Company's Annual Report on Form 10-K under the heading "Risk Factors." The Company undertakes no obligation to release publicly any revisions to any forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events, except as required by law.

	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		
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 (Deficit)	8,985,616	5,501,046
Total Liabilities & Stockholders' Equity (Deficit)	\$ 26,710,300	\$ 23,169,848

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	<u>7,770,001</u>	<u>6,000,804</u>
Cost of tissue and medical devices sales	<u>1,858,722</u>	<u>987,356</u>
Gross Profit	<u>5,911,279</u>	<u>5,013,448</u>
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	<u>7,184,442</u>	<u>6,949,807</u>
Loss from Operations	<u>(1,273,163)</u>	<u>(1,936,359)</u>
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)	<u>226,368</u>	<u>6,853,145</u>
Net Loss Before (Provision) Benefit for Income Taxes	<u>(1,046,795)</u>	<u>4,916,786</u>
(Provision) Benefit for Income Taxes		
Current	-	-
Deferred	-	-
Net (Loss) Income	<u>\$ (1,046,795)</u>	<u>\$ 4,916,786</u>
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

Contact:

Hayden IR
James Carbonara, Regional Vice President
646-755-7412
james@haydenir.com

Brett Maas, Managing Partner
646-536-7331
brett@haydenir.com
