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 12, 2011

Bacterin International Holdings, Inc.

(Exact Name of Registrant as Specified in Its Charter)

 Delaware

 (State or Other Jurisdiction of Incorporation)

 001-34951
 20-5313323

 (Commission File Number)
 (IRS Employer Identification No.)

 600 Cruiser Lane
 59714

 Belgrade, Montana
 59714

 (Address of Principal Executive Offices)
 (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 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 12, 2011 entitled "Bacterin International Holdings, Inc. Reports First Quarter 2011 Financial Results" 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 <u>www.bacterin.com</u>, 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, 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 filed April 11, 2011. 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.
- 99.1 Press Release dated May 12, 2011 entitled "Bacterin International Holdings, Inc. Reports First Quarter 2011 Financial Results."

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 12, 2011

BACTERIN INTERNATIONAL HOLDINGS, INC.

By: /s/ Guy S. Cook

Name: Guy S. Cook Title: President and Chief Executive Officer

EXHIBIT INDEX

99.1 Press Release of Bacterin International Holdings, Inc. dated May 12, 2011 entitled "Bacterin International Holdings, Inc. Reports First Quarter 2011 Financial Results"



Bacterin International Holdings, Inc. Reports First Quarter 2011 Financial Results

Bacterin delivers over 119% year-over-year and 13.5% sequential quarter-over-quarter revenue growth

BELGRADE, MT, – May 12, 2011 – Bacterin International Holdings, Inc. (NYSE Amex: BONE) ("Bacterin"), a creator and developer of revolutionary bone graft material and anti-microbial coatings for medical applications, today reported financial results for its first quarter ended March 31, 2011. Since the beginning of the new year, Bacterin:

- · materially increased the number of medical facilities in which its products are used,
- · doubled its capacity through installation of new equipment and increased its donor supply,
- · added executive management talent,
- secured \$5 million credit facility with BridgeBank and completed a private equity round totaling \$1.9 million,
- · launched its second scaffold Osteosponge[®]SC in mid February and immediately secured a major orthopedic hospital group to begin use of the product,
- · launched on May 5, 2011 its third biologics scaffold hMatrix™ that addresses dermal defects,
- signed a Letter of Intent to acquire Robinson MedSurg, and,
- $\cdot\,$ on March 7, 2011 achieved NYSE Amex listing status.

Bacterin reported revenues of \$6.0 million for the first quarter 2011, an increase of approximately 119 percent as compared to \$2.7 million for the previous yea first quarter and an increase of 13.5 percent compared to revenues of \$5.3 million in the fourth quarter of 2010. This quarter marks Bacterin's sixth consecutive growth quarter and is due largely to product penetration and continued expansion of a direct sales force. Bacterin anticipates continued revenue growth acceleration with the maturation of its expanded sales force and as the two recently launched significant biologics scaffolds, Osteosponge[®]SC and hMatrix^{TN} penetrate the market.

The Company reported net income of \$4.9 million or \$0.11 per diluted share for the first quarter of 2011, which includes approximately \$7.2 million of income from the decrease in non cash warrant derivative liability. This compares to a net loss of \$(1.6) million or \$(0.05) per basic share for the first quarter 2010 and a net loss of \$(6.7) million or \$(0.18) per basic share for the prior fourth quarter 2010, which included a non cash warrant derivative liability charge of \$2.4 million. Bacterin reported a loss from operations of \$(1.9) million during the first quarter 2011 versus a loss of \$(1.0) million during the prior year first quarter and a loss of \$(3.9) million in the fourth quarter 2010. The Company expects to achieve operating and cash flow profitability during 2011.

For the three months ended March 31, 2011, Bacterin's gross profit on revenue totaled \$5.0 million, yielding a gross margin of 83.5 percent, compared to 77.9 percent for the three months ended March 31, 2010 and 71.1 percent for the fourth quarter of 2010. The increase in the gross margin compared to the firs quarter of 2010 was due to improved manufacturing efficiencies associated with a higher utilization of the company's manufacturing capacity. Bacterin expects gross margin to remain above 75 percent for the foreseeable future.

Operating expenses during the first quarter of 2011 totaled \$6.9 million, an increase of approximately \$3.8 million or 120 percent over the first quarter of 201(and an increase of approximately \$675,000 or 9 percent over the fourth quarter of 2010. A significant portion of that increase was attributed to costs associated with sales and marketing due to increased commission and travel costs of the larger direct sales force as well as a substantial increase in marketing and advertising activities in 2011 as part of the Company's continue conversion to a direct sales force model from a distributor based model. As a percentage o revenue, sales and marketing costs were 71 percent in the first quarter of 2011. Going forward, the Company expects this percentage to decrease. As the direct sales force reaches year two of their employment, commission rates will decrease per the Company's commission program. In addition, the direct sales force carries a lower commission rate than distributor commissions and an increasing portion of company sales will come from the direct sales force. General and administrative costs during the quarter totaled \$2.3 million, which included approximately \$195,000 of non recurring charges and \$380,000 of non cash stocl option compensation expense. Although general and administrative costs increased 57 percent year-over-year as the company built its support infrastructure and became a public company, quarter-over-quarter costs declined by \$508,000. While Bacterin anticipates a continued increase in total operating expenses going forward as its revenues increase due to variable sales commissions, it expects to leverage its general and administrative expenses for the remainder of the year. The Company incurred interest expense for the quarter of \$372,000, a year-over-year decrease of \$151,000 and a quarter-over-quarter decrease o \$112,000.

As of March 31, 2011, the Company reported cash and equivalents balance of \$375,000, accounts receivable of \$4.2 million and an inventory balance of \$7.4 million. During January 2011, Bacterin closed a credit facility for up to \$5 million, subject to certain borrowing base limitations, with Bridge Bank tha provides access to credit secured by certain accounts receivable balances. The Company has drawn down \$1.8 million during the first quarter 2011 from this credit facility. In addition, on May 3, 2011, the Company announced that it has raised approximately \$1.9 million in a private placement transaction under Rule 506 of Regulation D. The transaction resulted in the issuance of 563,000 shares of the Company's common stock and warrants to purchase 225,000 shares of the Company's common stock.

At March 31, 2011 the Company's current ratio was 1.5 to 1 with long term debt totaling \$3.4 million. At quarter end, stockholders' equity totaled \$5.8 million As of March 31, 2011, Bacterin had approximately 37.7 million shares of common stock outstanding and fully diluted shares of approximately 51.5 millior (inclusive of all options and warrants). At March 31, 2011 the Company had operating tax loss carry forwards of approximately \$16.3 million that may be used to offset future taxable income, the earliest portion of which expires in 2024.

"Since the beginning of the year, we have put the pieces in place to support a dynamic year for Bacterin. It became evident to us that the demand for our curren and newly launched products is growing rapidly. Our challenge is to further develop the operations to meet the increasing order flow. Financially, we have always run the business with a lean amount of working capital. We have begun addressing this issue with our accounts receivable credit line and the recently announced equity capital raise of \$1.9 million. In order to meet the growing demand for our products, we installed additional equipment and are in the process of increasing our donor allotment. In addition, we realized that shifting to a direct sales force model requires us to provide a more comprehensive produc line. We have addressed this point by launching two additional scaffolds with characteristics that distinguish them in their prospective markets. We wil continue to position Bacterin for accelerated, profitable growth and are within sight of quickly achieving this goal," commented Guy Cook, the Company's chairman and CEO.

Conference Call Details:

 Date/Time:
 Thursday, May 12, 2011—4:30 p.m. (ET)

 Telephone Number:
 888-713-4216

 International Dial-In Number:
 617-213-4868

 Participant Pass code:
 87304304

Internet Access:

www.bacterin.com or www.earnings.com

It is recommended that participants phone-in at least 10 minutes before the call is scheduled to begin. Participants may pre-register for the call at https://www.theconferencingservice.com/prereg/key.process?key=PM83BKEBN

Pre-registrants will be issued a pin number to use when dialing into the live call which will provide quick access to the conference by bypassing the operato upon connection. A replay of the conference call in its entirety will be available approximately one hour after its completion by dialing 888-286-8010 (U.S.) 617-801-6888 (International) and entering the pass code **46840748** and on the Internet at www.earnings.com.

Investor Contact:

Yvonne L. Zappulla Managing Director Grannus Financial Advisors, Inc. 212-681-4108 Yvonne@GrannusFinancial.com

or

John Gandolfo Chief Financial Officer Bacterin International Holdings, Inc. 406-388-0480 Jgandolfo@bacterin.com

About Bacterin International Holdings, Inc.

BACTERIN INTERNATIONAL HOLDINGS, INC. ("the "Company" or "Bacterin") develops, manufactures and markets biologics products to domestic and international markets. Bacterin's proprietary methods optimize the growth factors in human allografts to create the ideal stem cell scaffold and promote bone and other tissue growth. These products are used in a variety of applications including enhancing fusion in spine surgery, relief of back pain with a facet joint stabilization, promotion of bone growth in foot and ankle surgery, promotion of cranial healing following neurosurgery and subchondral repair in knee and other joint surgeries.

Bacterin's Medical Device division develops antimicrobial coatings based upon proprietary coating technologies. Bacterin's strategic coating initiatives include antimicrobial coatings designed to inhibit biofilm formation and microbial contamination. Headquartered in Belgrade, Montana, Bacterin operates a 32,000 square foot., state-of-the-art, fully compliant and FDA registered facility, equipped with five "Class 100" clean rooms. For further information please visi www.bacterin.com.

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 upor 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. These forward-looking statements are based on current expectations or beliefs and include, but are not limited to, statements about the Company's earnings release and its expectations based on the results of full year 2010 and first quarter 2011, including reductions in expenses and increases in revenues due to among other things, the growth of its sales force. 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 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 and willingness of third-party manufacturers to timely and cost-effectively fulfill orders from the Company; 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. 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.

*** Financial Statements Follow ***

BACTERIN INTERNATIONAL HOLDINGS, INC. CONDENSED CONSOLIDATED BALANCE SHEETS

	March 31, 2011		December 31,	
				2010
ASSETS		(Unaudited)		
Current Assets:				
Cash and cash equivalents	\$	375,413	\$	327,481
Accounts receivable, net of allowance of \$125,603 and \$157,269, respectively		4,238,645		3,522,031
Accounts receivable – related party		654,461		613,034
Inventories, net		6,233,091		5,440,638
Prepaid and other current assets		517,311		572,015
	12,0	018,921 10,410,080		10,475,199
Property & equipment, net		3,406,559		3,397,320
Non-current inventories, net		1,118,170		1,439,384
Intangible assets, net		417,151		355,639
Note receivable – related party		82,398		82,398
Other assets		17,281		13,675
Total Assets	\$	17,060,480	\$	15,763,615
LIABILITIES & STOCKHOLDERS' EQUITY (DEFICIT)				
Current Liabilities:				
Accounts payable	\$	2,439,021	\$	2,260,237
Accounts payable – related party		789,935		573,036
Accrued liabilities		1,924,909		1,391,540
Warrant derivative liability		1,654,750		9,690,741
Current portion of capital lease obligations		15,817		30,105
Current portion of long-term debt		991,520		234,149
		7,815,952		14,179,808
Long-term Liabilities:				
Capital lease obligation, less current portion		16,965		13,185
Long-term debt, less current portion		3,390,434		2,189,866
Total Liabilities		11,223,351	-	16,382,859
		, -,	_	
Stockholders' Equity (Deficit)				
Preferred stock, \$.0001 par value; 5,000,000 shares authorized; no shares issued and outstanding no shares				
issued				
and outstanding		-		-
Common stock, \$0.000001 par value; 95,000,000 shares authorized; 37,677,334				
Issued shares and outstanding as of March 31, 2011 and 36,994,715 shares issued and outstanding on				
520,651				
outstanding shares on December 31, 2010 and 28,211,562				
on December 31, 2010		38		37
Additional paid-in capital		37,865,562		36,325,976
Retained deficit	_	(32,028,471)	_	(36,945,257)
Total Stockholders' Equity (Deficit)		5,837,129		(691,244)
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)	\$	17,060,480	\$	15,763,615
		<u> </u>		

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

	Three Months Ended March 31, 2011 2010		
Revenue		_	
Tissue sales	\$ 5,868,924	\$	2,704,975
Royalties and other	131,880		31,458
Total Revenue	 6,000,804		2,736,433
Cost of tissue sales	987,356		604,622
Gross Profit	5,013,448		2,131,811
Operating Expenses			
General and administrative	2,297,375		1,466,138
Sales and marketing	4,264,282		1,442,717
Depreciation	147,159		152,501
Non-cash consulting expense	 240,991		93,596
Total Operating Expenses	 6,949,807		3,154,952
Loss from Operations	 (1,936,359)		(1,023,141)
Other Income (Expense)			
Interest expense	(372,433)		(523,417)
Change in warrant derivative liability	7,218,806		(102,395)
Other income	 6,772		5,924
Total Other Income (Expense)	 6,853,145		(619,888)
Net Income (Loss) Before			
Benefit(Provision) for Income Taxes	 4,916,786		(1,643,029)
Benefit (Provision) for Income Taxes			
Current	-		-
Deferred	 -		-
Net Income (Loss)	\$ 4,916,786	\$	(1,643,029)
Net Income (Loss) per share:			
Basic	\$ 0.13	\$	(0.05)
Dilutive	\$ 0.11		NA
Shares used in the computation:	25 220 665		
Basic	37,330,665		36,468,563
Dilutive	44,419,879		NA