

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): February 10, 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 7.01 Regulation FD Disclosure.

The Company has issued a press release entitled “Bacterin Study at AAOS 2012 Annual Meeting Shows OsteoSponge® Equivalence to rhBMP-2 in Spinal Fusion; Presented Specifically to Orthopaedic Surgeons” which is attached as Exhibit 99.1 and incorporated herein.

The information in this Item 7.01 and the document attached as Exhibit 99.1 are being furnished and shall not be deemed “filed” for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended (the “Exchange Act”), nor otherwise subject to the liabilities of that section, nor incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

<u>Exhibit No</u>	<u>Description</u>
99.1	Press Release of Bacterin International Holdings, Inc. dated February 10, 2012 entitled “Bacterin Study at AAOS 2012 Annual Meeting Shows OsteoSponge® Equivalence to rhBMP-2 in Spinal Fusion; Presented Specifically to Orthopaedic Surgeons”

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: February 10, 2012

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 February 10, 2012 entitled “Bacterin Study at AAOS 2012 Annual Meeting Shows OsteoSponge® Equivalence to rhBMP-2 in Spinal Fusion; Presented Specifically to Orthopaedic Surgeons”

**Bacterin Study at AAOS 2012 Annual Meeting Shows
OsteoSponge® Equivalence to rhBMP-2 in Spinal Fusion;
Presented Specifically to Orthopaedic Surgeons**

BELGRADE, Mont. Feb. 10, 2012 - [Bacterin International Holdings](#), Inc. (NYSE Amex: BONE), a leader in the development of revolutionary bone graft material and antimicrobial coatings for medical applications, presented at the American Academy of Orthopaedic Surgeons (AAOS) 2012 Annual Meeting in San Francisco, CA, its study showing OsteoSponge® equivalence to rhBMP-2 in spinal fusion.

The study, first presented at EuroSpine 2011 in Milan, Italy in October of last year, was this past week featured at AAOS 2012, the largest gathering of companies displaying products and services specifically for the orthopaedic surgeon.

Since OsteoSponge has been released, surgeons have used Bacterin's bone graft implants more than 100,000 times, noting the product's unique handling properties, ability to irrigate the site, and quick insertion of the OsteoSponge scaffold into a bony defect or a spinal interbody cage.

"AAOS is a great stage to get in front of orthopaedic surgeons, who are the users of OsteoSponge, said Guy Cook, Bacterin's chairman and CEO. "Data from this study further validates OsteoSponge's effectiveness in spinal fusion surgery, and we were pleased to present to and meet with a highly targeted audience." Used in conjunction with the patients' own bone marrow aspirate, OsteoSponge is a highly effective osteoinductive and osteoconductive bone scaffold that aids in spinal fusion. The study was conducted in collaboration with researchers at the Salt Lake Orthopaedic Clinic, Spine Surgery of Salt Lake City.

The two-year prospective, randomized, and blinded clinical data showed OsteoSponge to be equivalent to rhBMP-2 in achieving an interbody fusion based upon radiographic assessment, CT scans, and quality of life outcomes. Additionally, patients receiving the OsteoSponge graft reported statistically significant less leg pain at one year relative to the rhBMP-2 group.

The abstract of this presentation, which evaluated the effectiveness of Bacterin's OsteoSponge allograft for use in lumbar spinal fusion and entitled, "Lumbar Interbody Fusion with OsteoSponge Demineralized Allograft in a PEEK Cage Compared to Fusion with rhBMP-2: Long Term Post-Operative Assessment," was published in European Spine Journal (Volume 20, Supplement 4, 421-464).

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.

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