

**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 June 30, 2015

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

XTANT MEDICAL 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.)

664 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

Non-accelerated filer

(Do not check if a smaller reporting company)

Accelerated filer

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 August 6, 2015: 11,746,051

XTANT MEDICAL HOLDINGS, INC.
FORM 10-Q

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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:

- Our ability to integrate our recent acquisition of X-spine Systems, Inc. and any future business combinations or acquisitions successfully;
- our ability to increase revenue;
- our ability to obtain financing on reasonable terms and maintain sufficient liquidity to fund our operations;
- our ability to comply with the covenants in our credit facility;
- the ability of our sales force to achieve expected results;
- our ability to remain competitive;
- government regulations;
- our ability to expand our production capacity;
- our ability to innovate and develop new products;
- our ability to obtain donor cadavers for our products;
- our ability to engage and retain qualified technical personnel and members of our management team;
- government and third-party coverage and reimbursement for our products;
- our ability to obtain regulatory approvals;
- product liability claims and other litigation to which we may be subject;
- product recalls and defects;
- timing and results of clinical studies;
- our ability to obtain and protect our intellectual property and proprietary rights; and
- infringement and ownership of intellectual property.

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 this Quarterly Report on Form 10-Q. 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

**XTANT MEDICAL HOLDINGS, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS**

	As of June 30, 2015 (unaudited)	As of December 31, 2014
ASSETS		
Current Assets:		
Cash and cash equivalents	\$ 2,026,108	\$ 4,468,208
Trade accounts receivable, net of allowance for doubtful accounts of \$1,322,569 and \$1,392,989, respectively	5,574,285	4,427,081
Inventories, net	9,392,150	9,558,648
Prepaid and other current assets	1,033,605	654,140
Total current assets	<u>18,026,148</u>	<u>19,108,077</u>
Non-current inventories	1,839,971	1,934,258
Property and equipment, net	4,430,038	4,654,527
Intangible assets, net	609,348	655,490
Other assets	1,446,515	1,598,539
Total Assets	<u>\$ 26,352,020</u>	<u>\$ 27,950,891</u>
LIABILITIES & STOCKHOLDERS' (DEFICIT) EQUITY		
Current Liabilities:		
Accounts payable	\$ 4,577,488	\$ 3,876,760
Accounts payable - related party	293,565	250,629
Accrued liabilities	2,399,599	1,921,301
Warrant derivative liability	1,796,660	1,320,371
Current portion of capital lease obligations	42,761	61,970
Current portion of royalty liability	1,169,500	1,000,750
Current portion of long-term debt	52,374	50,671
Total current liabilities	<u>10,331,947</u>	<u>8,482,452</u>
Long-term Liabilities:		
Capital lease obligation, less current portion	37,496	11,808
Long-term royalty liability, less current portion	6,139,374	6,361,216
Long-term debt, less current portion	21,691,674	20,870,330
Total Liabilities	<u>38,200,491</u>	<u>35,725,806</u>
Commitments and Contingencies		
Stockholders' (Deficit) Equity		
Preferred stock, \$0.000001 par value; 5,000,000 shares authorized; no shares issued and outstanding	-	-
Common stock, \$0.000001 par value; 95,000,000 shares authorized; 7,464,085 shares issued and outstanding as of June 30, 2015 and 6,679,646 shares issued and outstanding as of December 31, 2014	7	7
Additional paid-in capital	66,091,741	63,091,620
Accumulated deficit	(77,940,219)	(70,866,542)
Total Stockholders' Deficit	<u>(11,848,471)</u>	<u>(7,774,915)</u>
Total Liabilities & Stockholders' Deficit	<u>\$ 26,352,020</u>	<u>\$ 27,950,891</u>

See notes to unaudited condensed consolidated financial statements.

XTANT MEDICAL HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2015	2014	2015	2014
Revenue				
Tissue sales	\$ 9,732,909	\$ 8,714,915	\$ 19,009,956	\$ 17,466,260
Royalties and other	159,706	169,017	385,773	330,642
Total Revenue	<u>9,892,615</u>	<u>8,883,932</u>	<u>19,395,729</u>	<u>17,796,902</u>
Cost of sales	<u>3,375,288</u>	<u>3,290,512</u>	<u>6,847,766</u>	<u>6,701,218</u>
Gross Profit	<u>6,517,327</u>	<u>5,593,420</u>	<u>12,547,963</u>	<u>11,095,684</u>
Operating Expenses				
General and administrative	2,399,133	2,093,792	4,824,300	4,382,595
Sales and marketing	5,035,577	4,405,227	9,749,249	8,460,431
Research and development	291,171	322,277	724,732	576,860
Depreciation and amortization	100,663	82,432	224,774	157,580
Non-cash consulting expense	74,074	21,701	140,869	42,228
Total Operating Expenses	<u>7,900,618</u>	<u>6,925,429</u>	<u>15,663,924</u>	<u>13,619,694</u>
Loss from Operations	<u>(1,383,291)</u>	<u>(1,332,009)</u>	<u>(3,115,961)</u>	<u>(2,524,010)</u>
Other Income (Expense)				
Interest expense	(1,383,642)	(1,441,989)	(2,819,220)	(2,717,601)
Change in warrant derivative liability	(14,081)	870,494	(476,289)	(615,235)
Non-cash consideration associated stock agreement	-	-	(558,185)	-
Other income (expense)	(114,963)	3,074	(103,126)	(183,839)
Total Other Income (Expense)	<u>(1,512,686)</u>	<u>(568,421)</u>	<u>(3,956,820)</u>	<u>(3,516,675)</u>
Net Loss from Operations	<u>\$ (2,895,977)</u>	<u>\$ (1,900,430)</u>	<u>\$ (7,072,781)</u>	<u>\$ (6,040,685)</u>
Net loss per share:				
Basic	\$ (0.41)	\$ (0.35)	\$ (1.02)	\$ (1.11)
Dilutive	\$ (0.41)	\$ (0.35)	\$ (1.02)	\$ (1.11)
Shares used in the computation:				
Basic	7,137,391	5,514,694	6,914,698	5,447,204
Dilutive	7,137,391	5,514,694	6,914,698	5,447,204

See notes to unaudited condensed consolidated financial statements.

XTANT MEDICAL HOLDINGS, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Six Months Ended June 30,	
	2015	2014
Operating activities:		
Net loss	\$ (7,072,781)	\$ (6,040,685)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	446,799	345,580
Non-cash interest	363,375	-
Non-cash consideration associated with stock purchase agreement	558,185	-
Gain on sale of fixed assets	(17,215)	(13,285)
Amortization of debt discount	848,773	739,127
Non-cash consulting expense/stock option expense	444,395	668,876
Provision for losses on accounts receivable and inventory	(19,394)	338,720
Change in derivative warrant liability	476,289	615,235
Changes in operating assets and liabilities:		
Accounts receivable	(1,076,784)	(220,453)
Inventories	209,760	306,863
Prepaid and other assets	(352,704)	(274,825)
Accounts payable	742,767	1,040,469
Accrued liabilities	358,298	(1,376,180)
Net cash used in operating activities	<u>(4,090,237)</u>	<u>(3,870,558)</u>
Investing activities:		
Purchases of property and equipment and intangible assets	(70,441)	(115,202)
Proceeds from sale of fixed assets	16,415	36,071
Net cash used in investing activities	<u>(54,026)</u>	<u>(79,131)</u>
Financing activities:		
Proceeds from issuance of debt	-	4,000,000
Payments on long-term debt	(25,727)	(24,242)
Payments on capital leases	(64,442)	(82,987)
Payment on royalty obligation	(325,228)	-
Net proceeds from issuance of stock	2,117,560	-
Net cash provided by financing activities	<u>1,702,163</u>	<u>3,892,771</u>
Net change in cash and cash equivalents	(2,442,100)	(56,918)
Cash and cash equivalents at beginning of period	4,468,208	3,046,340
Cash and cash equivalents at end of period	<u>\$ 2,026,108</u>	<u>\$ 2,989,422</u>

See notes to unaudited condensed consolidated financial statements.

Notes to Unaudited Condensed Consolidated Financial Statements

(1) Business Description and Summary of Significant Accounting Policies

Business Description

The accompanying consolidated financial statements include the accounts of Xtant Medical Holdings, Inc. ("Xtant") formerly known as Bacterin International Holdings, Inc., a Delaware corporation, and its wholly owned subsidiary, Bacterin International, Inc., ("Bacterin") a Nevada corporation (Xtant and Bacterin are jointly referred to herein as, the "Company"). All intercompany balances and transactions have been eliminated in consolidation. Bacterin develops, manufactures and markets biologic products to domestic and international markets. Bacterin's proprietary methods are used to process human derived allografts into scaffolds that 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 regeneration in knee and other joint surgeries.

Bacterin also previously developed and licensed coatings for various medical device applications. As of December 31, 2014, Bacterin made a strategic decision to discontinue the medical device coatings business which resulted in an impairment of related assets. (See Note 4, "Impairment of Assets").

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. Up until December 31, 2014, the Company operated two distinct lines of business consisting of the biologics and the device divisions; however, due to immaterial revenue from the device division, the Company has reported as one segment.

On July 31, 2015, Xtant acquired all of the outstanding capital stock of X-spine Systems, Inc. ("X-spine") for approximately \$60 million in cash, repayment of approximately \$13 million of X-spine debt, and approximately 4.24 million shares of Xtant common stock. (See Note 15 Subsequent Events) X-spine is engaged in the development, manufacturing and sale of medical devices for use in orthopedic spinal surgeries. Financial statements of X-spine are not included in this report because the acquisition occurred after the end of the second quarter.

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 methods, 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 our business.

The accompanying interim condensed consolidated financial statements of the Company for the six months ended June 30, 2015 and 2014 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, 2015.

These financial statements should be read in conjunction with the financial statements and notes thereto which are included in our Annual Report on Form 10-K for the year ended December 31, 2014. 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.

Reverse Stock Split

Xtant completed a 1:10 reverse split of its common stock, effective at the close of business on Friday, July 25, 2014 and in effect for trading purposes on Monday, July 28, 2014. The reverse stock split was approved by Xtant shareholders at the 2014 Annual Meeting of Shareholders on June 11, 2014. All references to common stock, stock options, restricted stock units, warrants, and per share amounts have been retroactively adjusted to reflect the reverse stock split for all periods presented.

Public Offering

In August 2014, Xtant offered 1,143,000 shares of its common stock at \$5.70 per share and warrants to purchase 571,500 shares of its common stock at an exercise price of \$7.12 per share to the public. Gross proceeds of the offering were approximately \$6.5 million. Net proceeds from the offering were approximately \$5.9 million and were used for working capital and general corporate purposes. The offering closed on August 6, 2014. The warrants have a five year term and expire on August 6, 2019. We utilize a valuation model to determine the fair market value and account for these warrants as a derivative liability (see "Derivative Instruments" below). (Also, see Note 10, "Warrants" below).

Aspire Capital Transaction

We entered into a Common Stock Purchase Agreement on March 16, 2015, as amended and restated on April 17, 2015 (the "Purchase Agreement"), with Aspire Capital Fund, LLC ("Aspire Capital"), which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$10.0 million of our shares of common stock over the approximately 24-month term of the Purchase Agreement. Pursuant to the terms of the Purchase Agreement, in the first quarter of 2015 we issued 207,182 shares of our common stock to Aspire Capital for \$750,000 in aggregate proceeds, along with 154,189 shares of our common stock which were valued at \$3.62 per share and included as \$558,185 on the Statement of Operations to Aspire Capital as a commitment fee. In the second quarter of 2015, following the effectiveness of our Registration Statement on Form S-1, we issued 417,000 shares of our common stock to Aspire Capital for \$1,387,439 in aggregate proceeds, which were used for working capital and general corporate purposes. (See Note 2, "Equity" below).

Concentrations and Credit Risk

The Company's accounts receivable are due from a variety of health care organizations and distributors throughout the world. Approximately 97% and 98% of sales were in the United States respectively for the six months ended 2015 and 2014. No single customer accounted for more than 10% of revenue or accounts receivable for the comparable periods. 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 June 30, 2015.

Revenue by geographical region is as follows:

	Six Months Ended	
	June 30,	
	2015	2014
United States	\$ 18,831,197	\$ 17,509,988
Rest of World	564,532	286,914
	<u>\$ 19,395,729</u>	<u>\$ 17,796,902</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. Significant estimates include 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; royalty liability; 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.

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. See Note 4, "Impairment of Assets".

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 have been met.

The Company also receives royalty revenue from third parties related to licensing agreements. The Company has royalty agreements with RyMed and Bard Access Systems. Revenue under these agreements represented less than 0.5% of total revenue for the six months ended June 30, 2015 and 2014.

Advertising Costs

The Company expenses advertising costs as incurred. The Company had advertising expense of \$3,688 and \$27,914 for the six months ended June 30, 2015 and 2014, respectively.

Research and Development

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

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 three and six months ended June 30, 2015 and 2014, 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. Dilutive earnings per share are not reported as their effects of including 2,142,257 and 1,784,107 outstanding stock options and warrants for the six months ended June 30, 2015 and 2014, respectively, are anti-dilutive.

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.

The Company follows 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 and six months ended June 30, 2015 and 2014, there was no reclassification in financial assets or liabilities between Level 1, 2 or 3 categories.

The following table sets forth by level, within the fair value hierarchy, our liabilities as of June 30, 2015 and December 31, 2014 that are measured at fair value on a recurring basis:

Warrant derivative liability

	As of June 30, 2015	As of December 31, 2014
Level 1	-	-
Level 2	-	-
Level 3	\$ 1,796,660	\$ 1,320,371

The valuation technique used to measure fair value of the warrant liability is based on a valuation model and significant assumptions and inputs determined by us (See Note 10, "Warrants" below).

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 six months ended June 30, 2015:

Warrant derivative liability

Balance at January 1, 2015	\$ 1,320,371
Loss recognized in earnings in first quarter of 2015	462,208
Balance at March 31, 2015	1,782,579
Loss recognized in earnings in second quarter of 2015	14,081
Balance at June 30, 2015	<u>\$ 1,796,660</u>

During the first six months ended June 30, 2015, the Company did not change any of the valuation techniques used to measure its liabilities at fair value.

Recent Accounting Pronouncements

In November 2014, FASB issued ASU No. 2014-08, Presentation of Financial Statements (Topic 201) and Property, Plant and Equipment (Topic 360) - Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity. The amendments in this Update are effective for the annual period ending after December 15, 2014, and interim periods within those years. Early adoption is permitted only for disposals (or classifications as held for sale) that have not been reported in financial statements previously issued or available for issuance. ASU 2014-08 is not expected to have a material impact on our consolidated financial position, results of operations, or cash flows.

In April 2015, the FASB issued ASU 2015-3, to simplify the presentation of debt issuance costs. This update requires that debt issuance costs be presented in the balance sheet as a direct deduction from the carrying amount of the associated debt liability, consistent with the required presentation for debt discounts. This update is effective for interim and annual periods beginning after December 15, 2015. ASU 2015-3 is not expected to have a material impact.

(2) Equity

During the first quarter of 2014, the Company issued 150,000 shares of common stock to an affiliate of ROS Acquisition Offshore LP ("ROS") pursuant to a Sixth Amendment to our Credit Agreement with ROS whereby we borrowed an additional \$4 million under our Credit Agreement. This issuance has been accounted for as a debt discount and will be amortized over the life of the loan. (See Note 8, "Long-term Debt" below).

In August 2014, the Company offered 1,143,000 shares of its common stock at \$5.70 per share and warrants to purchase 571,500 shares of its common stock at an exercise price of \$7.12 per share to the public. Gross proceeds of the offering were approximately \$6.5 million. Net proceeds from the offering were approximately \$5.9 million and were used for working capital and general corporate purposes. The offering closed on August 6, 2014. The warrants have a five year term and expire on August 6, 2019. The Company utilizes a valuation model to determine the fair market value and accounts for these warrants as a derivative liability (See Note 1, "Fair Value of Financial Instruments" above). (Also, see Note 10, "Warrants" below).

We entered into a Purchase Agreement on March 16, 2015, as amended and restated April 17, 2015, with Aspire Capital which provides that, upon the terms and subject to the conditions and limitations set forth therein, Aspire Capital is committed to purchase up to an aggregate of \$10.0 million in shares of our common stock over the 24-month term. The stock purchase transactions are at the Company's option. Pursuant to the terms and conditions in the Purchase Agreement, in the first quarter of 2015, we issued 207,182 shares of our common stock for \$750,000 in aggregate proceeds, along with 154,189 shares of our common stock as a commitment fee. In the second quarter of 2015, following the effectiveness of our Registration Statement on Form S-1, we issued 417,000 shares of our common stock to Aspire Capital for \$1,387,439 in aggregate proceeds, which were used for working capital and general corporate purposes.

Under the Purchase Agreement, we have the right, at our sole discretion, to present Aspire Capital with purchase notices, directing Aspire Capital (as principal) to purchase up to 50,000 shares of our common stock, per trading day, provided that the aggregate price of each such purchase shall not exceed \$500,000 per trading day, at a per share price equal to the lesser of:

- the lowest sale price of our common stock on the purchase date; or
- the arithmetic average of the three lowest closing sale prices for our common stock during the ten consecutive trading days ending on the trading day immediately preceding the purchase date.

In addition, we also have the right to present Aspire Capital with volume-weighted average price purchase notices directing Aspire Capital to purchase an amount of our common stock equal to up to 30% of the aggregate shares of our common stock traded on the OTCQX marketplace on the next trading day, subject to the terms, conditions and limitations in the Purchase Agreement.

The Purchase Agreement may be terminated by us at any time, at our discretion, without any penalty or cost to us. The Purchase Agreement also provides for customary events of default, upon the occurrence of which Aspire Capital may terminate the Purchase Agreement. Aspire Capital has agreed that neither it nor any of its agents, representatives or affiliates shall engage in any direct or indirect short-selling or hedging of our common stock during any time prior to the termination of the Purchase Agreement. Any proceeds we receive under the Purchase Agreement are expected to be used for working capital and general corporate purposes.

(3) Inventories

Inventories consist of the following:

	June 30, 2015	December 31, 2014
Current inventories		
Raw materials	\$ 4,219,024	\$ 3,836,635
Work in process	2,407,919	2,484,635
Finished goods	5,131,354	5,163,458
	<u>11,758,297</u>	<u>11,484,728</u>
Reserve for obsolescence	(2,366,147)	(1,926,080)
Current inventories, total	<u>9,392,150</u>	<u>9,558,648</u>
Non-current inventories		
Finished goods	2,376,919	2,860,248
Reserve for obsolescence	(536,948)	(925,990)
Non-current inventories, total	<u>1,839,971</u>	<u>1,934,258</u>
Total inventories	<u>\$ 11,232,121</u>	<u>\$ 11,492,906</u>

(4) Impairment of Assets

During the fourth quarter of 2014, management decided to dispose of a group of components because of a shift in strategy for the Company. The component groups are the inventory and fixed assets associated with the Device Coatings and Cranial Maxillofacial Fixation (CMF) lines of business.

Sales for these product lines represented less than 1% of total revenue in both the first six months of 2015 and 2014. Gross profit associated with these product lines were less than 1% of total gross profit for both periods.

Total assets associated with the two lines at December 31, 2014 included \$80,042 of related fixed assets, net of depreciation, and related inventory of \$832,507 for a total value of \$912,549. These assets were transferred to Assets held for Sale and are classified on the balance sheet at December 31, 2014 as part of "Prepaid and other current assets". After the impairment provision, the net balance of the Assets Held for Sale was \$0 at December 31, 2014.

The sale of the CMF inventory occurred during the first quarter of 2015 and did not result in any tangible payment to the Company. The sale of the Device Coatings line of business occurred subsequent to June 30, 2015. (See Note 15, "Subsequent Event" below). The terms of the sale call for an initial payment to the Company of approximately \$250,000, and an additional contingent payment of \$100,000, both of which are secured by promissory notes.

(5) Property and Equipment, Net

Property and equipment, net are as follows:

	June 30, 2015	December 31, 2014
Buildings	\$ 1,657,579	\$ 1,657,579
Equipment	4,800,284	4,724,608
Computer equipment	225,009	225,009
Computer software	360,171	345,039
Furniture and fixtures	153,834	153,834
Leasehold improvements	2,381,413	2,380,617
Vehicles	10,000	41,099
Total cost	9,588,290	9,527,785
Less: accumulated depreciation	(5,158,252)	(4,873,258)
	<u>\$ 4,430,038</u>	<u>\$ 4,654,527</u>

The Company leases certain equipment under capital leases. For financial reporting purposes, minimum lease payments relating to the assets have been capitalized. As of June 30, 2015, the Company has recorded \$537,480 gross assets in Equipment, and \$212,568 of accumulated depreciation relating to assets under capital leases.

Maintenance and repairs expense for the six months of 2015 and 2014 was \$173,443 and \$140,504, respectively. Depreciation expense related to property and equipment, including property under capital lease for the first six months of 2015 and 2014 was \$336,913 and \$307,747, respectively.

(6) Intangible Assets

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

The following table sets forth information regarding intangible assets:

	June 30, 2015	December 31, 2014
Intellectual Property		
Gross carrying value	\$ 1,032,724	\$ 1,036,580
Accumulated amortization	(423,376)	(381,090)
Net carrying value	<u>\$ 609,348</u>	<u>\$ 655,490</u>
Aggregate amortization expense:	<u>\$ 75,860</u>	<u>\$ 77,022</u>

The following is a summary of estimated future amortization expense for intangible assets as of June 30, 2015:

Remainder of 2015	\$ 45,093
2016	59,343
2017	59,343
2018	59,154
2019	55,565
Thereafter	330,850
Total	<u>\$ 609,348</u>

(7) Accrued Liabilities

Accrued liabilities consist of the following:

	June 30, 2015	December 31, 2014
Accrued stock compensation	\$ 120,000	\$ -
Wages/commissions payable	1,565,827	1,434,743
Other accrued expenses	713,772	486,558
	<u>\$ 2,399,599</u>	<u>\$ 1,921,301</u>

(8) Long-term Debt

On March 6, 2014, we entered into a Sixth Amendment to our Credit Agreement with ROS whereby we borrowed an additional \$4.0 million under our Credit Agreement with ROS and agreed to issue 150,000 shares to an affiliate of ROS. We used the proceeds for working capital and general corporate purposes.

Long-term debt consists of the following:

	June 30, 2015	December 31, 2014
Loan payable to ROS Acquisition Offshore, LIBOR plus 12.13% maturing August 2019	\$ 24,000,000	\$ 24,000,000
Adjustment fee payable to ROS Acquisition Offshore, due in August 2019	700,000	700,000
6.00% loan payable to Valley Bank of Belgrade, \$10,746 monthly payments including interest, maturing December 24, 2030; secured by building	1,300,087	1,325,814
	<u>26,000,087</u>	<u>26,025,814</u>
Less: current portion	(52,374)	(50,671)
Debt discount	(4,256,039)	(5,104,813)
Long-term debt	<u>\$ 21,691,674</u>	<u>\$ 20,870,330</u>

The following is a summary of maturities due on the debt as of June 30, 2015:

Remainder of 2015	\$ 24,882
2016	2,112,064
2017	8,290,378
2018	8,293,897
2019	6,239,295
Thereafter	1,039,571
Total	<u>\$ 26,000,087</u>

The following is a summary of estimated future royalty payments as of June 30, 2015:

2015	\$ 525,000
2016	1,229,250
2017	1,360,250
2018	1,462,750
2019	1,575,250
Thereafter	5,626,325
Total	<u>\$ 11,778,825</u>

Subsequent to June 30, 2015, the Company issued \$65 million in convertible notes and borrowed additional amounts pursuant to an Amended and Restated Credit Agreement with ROS, both of which will have a material impact on long-term debt. (See Note 15, "Subsequent Event" below).

(9) Stock-Based Compensation

The Second Amended and Restated Bacterin International Equity Incentive Plan ("The Plan") which was approved at the annual stockholder meeting on June 24, 2015 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 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 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 administered by the compensation committee of our Board of Directors. Stock options granted under the 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 Plan must be at least equal to the fair market value of the shares of common stock on the date of the grant. 1,400,000 shares are authorized under the Plan and at June 30, 2015, we had approximately 580,000 shares available for issuance which are authorized, but unissued or reacquired shares.

Stock compensation expense recognized in the statement of operations for the six months ended June 30, 2015 and 2014 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:

	Six Months Ended June 30, 2015	Six Months Ended June 30, 2014
Risk-free interest rate	1.75%	1.76%
Expected volatility	80%	63%
Expected term	6.3 Years	5.51 Years
Expected forfeiture rate	20%	20%
Dividend yield	0%	0%

In July 2014, the Company granted our President an option to purchase 55,000 shares of our common stock outside of the Plan, and in August 2013, the Company granted our Chief Executive Officer an option to purchase 200,000 shares of our common stock outside of the Plan (collectively the "Non-Plan Grants").

Stock option activity, including options granted under the Plan and the Non-Plan Grants, was as follows:

	2015			2014		
	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	695,336	\$ 11.09	\$ 5.35	758,328	\$ 14.90	\$ 8.60
Granted	45,000	4.00	2.81	15,200	7.10	5.00
Exercised	-	-	-	(6,666)	1.00	-
Cancelled or expired	(28,480)	12.86	5.67	(66,576)	18.30	9.20
Outstanding at June 30	711,857	\$ 10.57	\$ 5.31	700,286	\$ 14.60	\$ 7.10
Exercisable at June 30	340,189	\$ 14.41	\$ 6.80	331,498	\$ 17.90	\$ 6.50

The aggregate intrinsic value of options outstanding as of June 30, 2015 was approximately \$28,750. The aggregate intrinsic value of exercisable options as of June 30, 2015 was approximately \$28,750. As of June 30, 2015, there were 371,668 unvested options with a weighted average fair value at the grant date of \$3.94 per option. As of June 30, 2015, we had approximately \$903,096 in compensation expense related to unvested awards not yet recognized.

From time to time we may grant stock options and 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 Company recognized non-cash consulting expense for the six months ended June 30, 2015 and 2014 as \$140,869 and \$42,228 respectively.

Total share based compensation recognized for employees, directors and consultants was \$444,352 and \$688,876 for the six months ended June 30, 2015 and 2014, respectively.

On November 10, 2014, the company issued 39,312 shares of restricted stock to the independent Directors of the Company. These restricted shares vested on July 1, 2015 and were issued when the stock price was \$4.07 per share. The total expense of \$160,000 was recognized ratably over the period in General and Administrative expense.

(10) Warrants

The following table summarizes our warrant activities for the period ended June 30, 2015:

	Shares	Weighted Average Exercise Price
Outstanding as of January 1, 2014	1,087,820	\$ 16.20
Issued	571,500	7.12
Expired	(4,000)	20.00
Outstanding at January 1, 2015	1,655,320	\$ 13.06
Issued	-	-
Expired	(224,920)	18.52
Outstanding at June 30, 2015	<u>1,430,400</u>	<u>\$ 12.20</u>

We utilize a valuation model to determine the fair market value of the warrants accounted for as liabilities. The valuation model accommodates the probability of exercise price adjustment features as outlined in the warrant agreements. We recorded an unrealized loss of \$14,081 resulting from the change in the fair value of the warrant derivative liability for first the first six months of 2015. Under the terms of some of our warrant agreements, 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 a common stock equivalent that is lower than the exercise price per share as stated in the warrant agreement.

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

	Six Months ended June 30,			
	2015		2014	
Value of underlying common stock (per share)	\$	3.50	\$	6.80
Risk free interest rate		1.60%		1.76%
Expected term		4.50 years		5.51 years
Volatility		80%		63%
Dividend yield		0%		0%

The following table summarizes our activities related to warrants accounted for as a derivative liability for the six months ended June 30, 2015 and 2014:

	2015	2014
Balance at January 1,	1,171,692	600,192
Derivative warrants issued	-	-
Derivative warrants exercised	-	-
Balance at June 30,	1,171,692	600,192

(11) Commitments and Contingencies

Operating Leases

We lease two office facilities under non-cancelable operating lease agreements with expiration dates in 2019 and 2023. We have the option to extend both the leases for another ten year term and for one facility, we have the right of first refusal on any sale. We lease additional office space under a month-to-month arrangement. Future minimum payments for the next five years and thereafter as of June 30, 2015, under these leases, are as follows:

Remainder of 2015	\$	193,900
2016		347,498
2017		280,527
2018		286,754
2019		166,940
Thereafter		559,000
Total	\$	1,834,619

Rent expense was \$182,739 and \$158,066 for the six months ended June 30, 2015 and 2014, 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 indemnification provisions 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.

Pending and Threatened Litigation

On March 17, 2014, a complaint was served on the Company in the following state court action in the District Court for the County of Arapahoe, State of Colorado: Robert Taggart v. Guy Cook, Bacterin International, Inc., a Nevada Corporation and Bacterin International Holdings, Inc., a Delaware corporation, Civil Action No. 14CV30401. The complaint involves claims under an employment agreement between plaintiff and the Company seeking commissions on Company sales, a commission on funds obtained by the Company as a result of a reverse merger and vesting of certain stock options. Plaintiff seeks damages in excess of \$5 million. The Company believes this case lacks legal merit and has filed counterclaims for plaintiff's breach of his employment agreement and breach of his duty of loyalty to the Company, asserting the right to recover all compensation paid to Plaintiff during his employment as well as other damages.

(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 2011 through 2014 tax years remain open to examination by the Internal Revenue Service and the 2009 to 2014 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 six months ended June 30, 2015 and 2014.

(13) Supplemental Disclosure of Cash Flow Information

Supplemental cash flow information is as follows:

	Six months Ended	
	June 30,	
	2015	2014
Supplemental disclosure of cash flow information		
Cash paid during the period for:		
Interest	\$ 1,610,291	\$ 1,730,188
Non-cash activities:		
Issuance of shares related to debt issuance	\$ -	\$ 1,094,999
Issuance of capital leases	\$ 70,020	\$ -

(14) Related Party Transactions

Darrel Holmes, our Chief Operating Officer, and Mitchell Godfrey, a former director, serve on the board of American Donor Services Inc. ("ADS"), and Mr. Godfrey also serves as secretary and treasurer for ADS. Msrs. Godfrey and Holmes each receive \$5,000 per year for their service to ADS. ADS recovers tissue from donors and we reimburse ADS for its recovery fees, which are comprised primarily of labor costs. The approximate aggregate amount of all transactions with ADS for the six months ended June 30, 2015 and 2014 was \$827,797 and \$1,897,489 respectively. Our relationship with ADS has benefited us, as ADS provides us with current donors and a pipeline for future donors, which is necessary to our success.

Unless delegated to the Compensation Committee by the Board of Directors, the Audit Committee or the disinterested members of the full Board of Directors reviews and approves all related party transactions.

(15) Subsequent Events

In July 2015, the Company sold its coatings and device business to Harland Medical Systems, Inc. for \$350,000 pursuant to the terms of an Asset Purchase Agreement. Payment is secured by two promissory notes, both of which bear interest at a rate of 5%. One note is for \$250,000 payable over approximately three years with the first payment due in September 2015. The second note is for \$100,000, which is also payable over approximately three years with the first payment due March 31, 2016. Payment on the second note is contingent on Harland receiving FDA approval on its 510(k) submission for certain related products.

On July 31, 2015 the Company acquired all of the outstanding capital stock of X-spine for approximately \$60 million in cash, repayment of approximately \$13 million of X-spine debt, and approximately 4.24 million shares of Xtant common stock. The acquisition combines Bacterin's strength in orthobiologics with X-spine's expertise in hardware, offering complementary product lines focused on orthopedic and spine surgical procedures.

The stock purchase agreement contains customary representations and warranties by each of the parties, as well as indemnification for breaches of the warranties and covenants by X-spine and the selling shareholders. To secure the indemnification obligations, \$6 million of the cash consideration and all of the shares of Xtant common stock were placed into escrow and may be used to settle indemnification claims.

Pursuant to the stock purchase agreement, X-spine's president, David Kirschman, was appointed as a Class II member of Xtant's Board of Directors.

The X-spine acquisition is considered the acquisition of a business and was accounted for under the purchase method of accounting. At the date of purchase of all identifiable tangible and intangible assets and liabilities purchased in the acquisition have been recognized at their estimated fair value.

The following reflects the allocation of the consideration to the net tangible and identifiable intangible assets of the Seller, based upon their estimated fair values:

Assets and Liabilities at Fair Value

Assets

Intangible assets	
Tradename	\$ 4,543,300
Technology	28,698,700
Non-Compete Agreement	40,500
Customer Relationship	9,911,000
	<u>Total intangible assets</u>
	43,193,500

Goodwill	22,816,088
Cash	3,000
Accounts Receivable	6,972,764
Inventory	12,861,550
Prepaid Expenses	204,167
Property, Plant & Equipment	7,533,106
	<u>Total Assets Acquired</u>
	93,584,175

Liabilities

Accounts Payable	3,703,097
Accrued Liabilities	2,164,179
Revolving Line of Credit	
	<u>Total liabilities</u>
	5,867,276

Consideration

Cash Consideration	72,867,606
Stock Consideration	14,849,293
Total Consideration	<u>\$ 87,716,899</u>

As noted above in the table, we acquired accounts receivables as part of the asset acquisition of X-Spine. As of the date of the acquisition, the estimated fair value and the contractual value of the receivables were the same. As of the date of the acquisition we did not determine that any of the receivables would ultimately become uncollectible. After the specific identification of net tangible and identifiable intangible assets of the sellers and allocation of the acquisition cost, the Company is expected to recognize approximately \$23 million of goodwill. At this time, none of the goodwill is expected to be deductible for tax purposes.

Convertible Notes

Concurrent with the acquisition of X-spine, the Company completed an offering of \$65.0 million aggregate principal amount of its 6.00% convertible senior unsecured notes due 2021 (the "Notes") in a private offering to qualified institutional buyers, as defined in Rule 144A under the Securities Act of 1933, as amended. Certain private investment funds for which OrbiMed Advisors LLC, one of the Company's existing stockholders, serves as the investment manager, purchased \$52.0 million aggregate principal amount of the Notes directly from the Company in the offering. The Company has granted the investment bank acting as initial purchaser in the offering a 30-day option to purchase up to an additional \$9.75 million aggregate principal amount of Notes from the Company. On August 10, 2015, the initial purchaser exercised its option with respect to an additional \$3 million aggregate principal amount of Notes, reserving its right to subsequently exercise its right to purchase additional Notes during the remainder of the option period.

The Notes bear interest at a rate equal to 6.00% per year. Following the first interest payment date, which will be on April 15, 2016, interest on the Notes will be payable semiannually in arrears on January 15 and July 15 of each year. Interest will accrue on the Notes from the last date to which interest has been paid

or duly provided for or, if no interest has been paid or duly provided for, from July 31, 2015. Unless earlier converted or repurchased, the Notes will mature on July 15, 2021.

At any time prior to the close of business on the second business day immediately preceding the maturity date, holders may convert their Notes into shares of Xtant common stock (together with cash in lieu of fractional shares) at an initial conversion rate of 257.5163 shares per \$1,000 principal amount of Notes (which represents an initial conversion price of approximately \$3.88 per share). However, a Note will not be convertible to the extent that such convertibility or conversion would result in the holder of that Note or any of its affiliates being deemed to beneficially own in excess of 9.99% of the then-outstanding shares of Xtant common stock. The conversion rate will be subject to adjustment as described in the Indenture. In addition, Xtant will, in certain circumstances, increase the conversion rate for holders who convert their Notes in connection with a “make-whole fundamental change” (as defined in the Indenture). No sinking fund is provided for the Notes. Xtant may not redeem the Notes at its option prior to their maturity. If a “fundamental change” (as defined in the Indenture) occurs, holders will have the right, at their option, to require us to repurchase their Notes at a cash price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date, subject to the right of holders of Notes on a record date to receive accrued and unpaid interest.

The Notes are Xtant’s senior, unsecured obligations, rank equal in right of payment with its existing and future unsecured indebtedness that is not junior to the Notes, are senior in right of payment to any of its existing and future indebtedness that is expressly subordinated to the Notes, and are effectively subordinated to its existing and future secured indebtedness to the extent of the value of the collateral securing such indebtedness. The Notes are structurally subordinated to all existing and future indebtedness and other liabilities, including trade payables, and (to the extent Xtant is not a holder thereof) preferred equity, if any, of its subsidiaries.

Amended and Restated Credit Agreement

On July 31, 2015, Bacterin refinanced approximately \$24 million in existing term loans and borrowed an additional \$18 million pursuant to an Amended and Restated Credit Agreement with ROS (the “New Facility”). The maturity date of the New Facility will be July 31, 2020 (the “Maturity Date”). Interest under the New Facility will be bifurcated into a “cash pay” portion and a “payment-in-kind” portion. Until June 30, 2018 (the “First Period”), interest on loans outstanding under the New Facility will accrue at a rate equal to the sum of (a) 9% per annum, which portion of interest will be payable in cash, plus (b) additional interest (“PIK Interest”) in an amount equal to (i) the sum of 14% per annum, plus the higher of (x) LIBOR and (y) 1% per annum, minus (ii) 9% per annum, which portion of interest will be payable “in kind.” During the portion of the First Period before December 31, 2015 (the “Optional PIK Period”), we may elect at our option to have all or any portion of interest on loans outstanding under the New Facility to accrue during the Optional PIK Period at a rate equal to the sum of 14% per annum, plus the higher of (x) LIBOR and (y) 1% per annum, which portion of interest will be payable “in kind.” On or after June 30, 2018 until the New Facility is repaid in full (the “Second Period”), interest on loans outstanding under the New Facility will accrue at a rate equal to the sum of (a) 12% per annum, which portion of interest will be payable in cash, plus (b) PIK Interest in an amount equal to the difference of (i) the sum of 14% per annum, plus the higher of (x) LIBOR and (y) 1% per annum, minus (ii) 12% per annum, which portion of interest will be payable “in kind.” In both the First Period and the Second Period, the portion of accrued interest constituting PIK Interest will not be payable in cash but will instead be added to the principal amount outstanding under the New Facility. However, at our option, we may choose to make any “payment-in-kind” interest payment in cash. Until the third anniversary of the closing date of the New Facility, we will not be allowed to voluntarily prepay the New Facility. Whenever loans outstanding under the New Facility are prepaid or paid, whether voluntarily, involuntarily or on the Maturity Date, a fee of 7.5% on the amount paid will be due and payable. The New Facility contains financial and other covenant requirements, including, but not limited to, financial covenants that require the Company to maintain revenue and liquidity at levels set forth in the New Facility and ensure that the Company’s senior consolidated leverage ratio does not exceed levels set forth in the New Facility. The New Facility also restricts the Company from making any payment or distribution with respect to, or purchasing, redeeming, defeasing, retiring or acquiring, the Notes other than payments of scheduled interest on the Notes, issuance of shares of our common stock upon conversion of the Notes, and payment of cash in lieu of fractional shares. The loans under the New Facility are guaranteed by Xtant and its current and future subsidiaries and are secured by substantially all of the current and future assets of Xtant and its subsidiaries. The additional amount borrowed under the New Facility was used to pay a portion of the X-spine acquisition, with the balance being available for general corporate purposes.

The accounting treatment for the Notes and for the New Facility with ROS have been done in accordance with ASC Subtopic 470-50, Debt Modifications and Extinguishments, and ASC Subtopic 470-60, Troubled Debt Restructurings by Debtors.

Approximately \$4.8 million of expenses were incurred in conjunction with the acquisition, the issuance of convertible debt and the amendment and restatement of our credit facility with ROS. Of that amount, approximately \$2.2 million of debt issuance costs will be capitalized and amortized over the life of the debt and approximately \$2.6 million will be expensed in Q3 2015 related to the acquisition itself.

After payment of the consideration and expenses related to the acquisition and the related financing transactions, our cash on hand increased by approximately \$5.6 million which will be used to fund the ongoing business of the combined entities.

Name Change

Following the closing of the acquisition, on July 31, 2015, Bacterin International Holdings, Inc. changed its name to Xtant Medical Holdings, Inc.

New Subsidiary

On August 6, 2015 Xtant formed a new wholly owned subsidiary, Xtant Medical, Inc., a Delaware corporation.

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, the ability of our sales force to achieve expected results; 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 this Quarterly Report on Form 10-Q.

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.

Results of Operations

Comparison of Three Months Ended June 30, 2015 and June 30, 2014

Revenue

Total revenue for the three months ended June 30, 2015 increased approximately 11.4% to \$9,892,615 compared to \$8,883,932 in the prior year. The increase of \$1,008,683 is due to improved sales force productivity realized from increased sales headcount and manufacturer representatives.

Cost of sales

Costs of tissue sales consist primarily of tissue manufacturing costs. Costs of tissue sales increased by 2.6% or \$84,776 to \$3,375,288 for the three months ended June 30, 2015 from \$3,290,513 for the three months ended June 30, 2014. As a percentage of tissue sales, cost of tissue sales was 34.1% of revenues for the three months ended June 30, 2015 compared to 37.0% in the same period in 2014. The decrease is the result of improved manufacturing efficiencies including the impact of new products and a change in product and customer mix between the two periods.

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 14.1%, or \$975,188 for the three months ended June 30, 2015 compared to the three months ended June 30, 2014, primarily due to the reasons set forth 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 14.6%, or \$305,341, to \$2,399,133 for the three months ended June 30, 2015 compared to the same period of 2014. Most of the increase is due to additional head count in operations and administration as a result of increased sales activity.

Sales and Marketing

Sales and marketing expenses primarily consist of costs for sales and marketing personnel, sales commissions, costs for trade shows, sales conventions and meetings, travel expenses, advertising and other sales and marketing related costs. Sales and marketing expenses increased 14.3%, or \$630,350, to \$5,035,577 for the three months ended June 30, 2015 compared to the same period of 2014. The increase is due to increased commissions tied to increased revenues. As a percentage of revenue, sales and marketing expenses increased to 50.9% in the three months ended June 30, 2015 from 49.6% compared to the same period of 2014.

Research and Development

Research and development expenses consist primarily of internal costs for the development of new technologies and processes for tissue and coatings. Research and development expenses decreased \$31,106 or 9.7% from \$322,277 for the three months ended June 30, 2014 to \$291,171 for the same period of 2015. The decrease is due to decreased spending on research and development projects.

Depreciation

Depreciation expense consists of depreciation of long-lived property and equipment. Depreciation expense increased \$18,231 to \$100,663 for the three months ended June 30, 2015 from \$82,432 in the same period in 2014.

Non-cash Consulting Expense

Non-cash consulting expense consists of non-cash expense associated with granting restricted stock and stock to directors and consultants. Non-cash consulting expense increased \$52,373 to \$74,074 for the months ended June 30, 2015 from \$21,701 in the same period in the prior year.

Interest Expense

Interest expense is from our debt instruments. Interest expense for the three months ended June 30, 2015 decreased \$58,347 to \$1,383,642 as compared to \$1,441,989 in the same period in 2014.

Change in Warrant Derivative Liability

For the three months ended June 30, 2015, the Company recorded a loss from an increase in its non-cash warrant derivative liability of \$14,081 which was primarily driven by the increase in the volatility of the Company's common stock from March 31, 2015 to June 30, 2015. The liability is associated with the issuance of warrants as part of the Company's prior convertible debt financing, the Company's 2010 financing and the Company's 2014 equity financing which contain certain provisions requiring the Company to record a change in the warrant derivative liability from period to period.

Other Income/Expense

Other expense for the three months ended June 30, 2015 was \$114,963 as compared to income of \$3,074 in the same period in 2014. The change is related to a legal settlement from 2014.

Comparison of Six Months Ended June 30, 2015 and June 30, 2014

Revenue

Total revenue for the six months ended June 30, 2015 increased approximately 9.0% to \$19,395,729 compared to \$17,796,902 in the prior year. The increase of \$1,598,827 is due to improved sales force productivity realized from increased sales headcount and manufacturer representatives.

Cost of sales

Costs of tissue sales consist primarily of tissue manufacturing costs. Costs of tissue sales increased by 2.2% or \$146,548 to \$6,847,766 for the six months ended June 30, 2015 from \$6,701,218 for the first six months of 2014. As a percentage of tissue sales, cost of tissue sales was 35.3% of revenues for the six months ended June 30, 2015 compared to 37.7% in the first six months of 2014. The decrease is the result of improved manufacturing efficiencies including the impact of new products, and a change in product and customer mix between the two periods.

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 15.0%, or \$2,044,230 for the six months ended June 30, 2015 compared to same period in 2014, primarily due to the reasons set forth below. Most of the increase is due to additional head count in operations and administration as a result of increased sales activity.

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 10.1%, or \$441,705, to \$4,824,300 for the six months ended June 30, 2015 compared to the same period of 2014.

Sales and Marketing

Sales and marketing expenses primarily consist of costs for sales and marketing personnel, sales commissions, costs for 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. Sales and marketing expenses increased 15.2%, or \$1,288,818, to \$9,749,249 for the six months ended June 30, 2015 compared to the same period of 2014. The increase is due to increased commissions tied to increased revenues and the addition of the increased number of sales assets. As a percentage of revenue, sales and marketing expenses increased to 50.3% in the first six months of 2015 from 47.5% in the prior year first six months.

Research and Development

Research and development expenses consist primarily of internal costs for the development of new technologies and processes for tissue and coatings. Research and development expenses increased \$147,872 or 25.6% from \$576,860 for the six months ended June 30, 2014 to \$724,732 for the same period of 2015. The increase is due to increased spending on research and development projects.

Depreciation

Depreciation expense consists of depreciation of long-lived property and equipment. Depreciation expense increased \$67,193 to \$224,774 for the six months ended June 30, 2015 from \$157,580 in the same period in 2014.

Non-cash Consulting Expense

Non-cash consulting expense consists of non-cash expense associated with granting restricted stock and stock to directors and consultants. Non-cash consulting expense increased \$98,641 to \$140,869 for the six months ended June 30, 2015 from \$42,228 in the same period in the prior year.

Interest Expense

Interest expense is from our debt instruments. Interest expense for the first six months of 2015 increased \$101,619 to \$2,819,220 as compared to \$2,717,601 in the first six months of 2014.

Change in Warrant Derivative Liability

For the first six months of 2015, the Company recorded a loss from an increase in its non-cash warrant derivative liability of \$476,289 which was primarily driven by the increase in the closing price of the Company's common stock June 30, 2015 compared to December 31, 2014 and by the increase of volatility of the company's common stock from March 31, 2015 to June 30, 2015.

Other Income/Expense

Other expense for the six months ended June 30, 2015 was \$103,126 as compared to an expense of \$183,839 in the same period in 2014.

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 facility and other debt transactions. For the six months ended June 30, 2015 we received \$2,137,439 from the sale of our common stock to Aspire Capital pursuant to a Purchase Agreement. See Note 2, "Equity", describing the Purchase Agreement with Aspire Capital. At June 30, 2015, we had \$7,600,393 of cash and cash equivalents and accounts receivables.

Net cash used in operating activities for the first six months of 2015 was \$4,098,936, primarily related to funds required to finance the Company's operations. For comparable period of 2014, net cash used in operating activities was \$3,870,558.

Net cash used in investment activities for the first six months of 2015 was \$124,948 due to the sale/retirement of property and equipment offset.

Net cash provided by financing activities was \$1,781,783 for the first six months of 2015, primarily due to proceeds from the sale of equity securities. See Note 2, "Equity" above.

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 June 30, 2015 cash on hand and accounts receivable balance of \$7,600,393 along with anticipated cash receipts from sales expected from operations and proceeds from the Aspire Capital financing will be sufficient to meet our anticipated cash requirements through June 30, 2016. We incurred approximately \$17 million in sales and marketing expenses in 2014 and expect to incur \$19 million in 2015 based upon our current sales estimates. The sales and marketing expenses are largely variable expenses and are anticipated to be funded from operating cash flow. An increase of these 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 or alternative sources of financing. 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.

On July 31, 2015, we acquired all of the outstanding capital stock of X-spine for approximately \$60 million in cash, repayment of approximately \$13 million in debt and approximately 4.24 million shares of our common stock. (See Note 15 Subsequent Events). Concurrent with the X-spine acquisition, we also completed an offering of \$65 million aggregate principal amount of 6.00% convertible senior unsecured notes due 2021, and we borrowed an additional \$18 million under an amended and restated credit facility with ROS. After payment of the consideration and expenses related to the acquisition and related financing transactions, our cash on hand increased by approximately \$5.6 million.

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 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 Rule 13a-15(e) under the Exchange Act) as of June 30, 2015. Based upon that evaluation, our chief executive officer and chief financial officer concluded that as of June 30, 2015, our disclosure controls and procedures were effective.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and 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 (2013) 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 (2013), management concluded that our internal control over financial reporting was effective as of June 30, 2015.

This report does not include an attestation report of the Company's independent public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's independent public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report.

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting during the quarter ended June 30, 2015 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

On March 17, 2014, a complaint was served on the Company in the following state court action in the District Court for the County of Arapahoe, State of Colorado: Robert Taggart v. Guy Cook, Bacterin International, Inc., a Nevada Corporation and Bacterin International Holdings, Inc. (now Xtant Medical Holdings, Inc.), a Delaware corporation, Civil Action No. 14CV30401. The complaint involves claims under an employment agreement between plaintiff and the Company seeking commissions on Company sales, a commission on funds obtained by the Company as a result of a reverse merger and vesting of certain stock options. Plaintiff seeks damages in excess of \$5 million. The Company believes this case lacks legal merit and has filed counterclaims for plaintiff's breach of his employment agreement and breach of his duty of loyalty to the Company, asserting the right to recover all compensation paid to Plaintiff during his employment as well as other damages.

Item 1A. Risk Factors

Our business and an investment in our securities involves a high degree of risk. The following risk factors describe some of the most significant events, facts or circumstances that could have a material adverse effect upon our business, financial condition, results of operations, ability to implement our business plan and the market price for our securities. Many of these events are outside of our control. If any of these risks actually occurs, our business, financial condition or results of operations may be materially adversely affected. In such case, the trading price of our common stock could decline and investors in our common stock could lose all or part of their investment.

Risks related to our acquisition of X-spine

Growth through an acquisition presents certain risks to our business and operations.

The acquisition of X-spine and any other acquisitions we may pursue present numerous risks, including the following:

- the possibility that the expected benefits of the transactions may not materialize in the timeframe expected, or at all, or may be more costly to achieve than anticipated;
- the acquired assets may not produce as expected;
- we may be unable to successfully develop the assets;
- there may be adverse stockholder reaction to the acquisitions; and
- the integration of these transactions may divert the attention of our management and other key employees from ongoing business activities, including the pursuit of other opportunities that could be beneficial to us.

Any one or more of these factors could negatively affect our business, financial condition or results of operations.

We have made certain assumptions relating to the acquisition that may prove to be materially inaccurate.

We have made certain assumptions relating to the acquisition of X-spine that may be inaccurate. Accordingly, we may fail to realize the expected benefits of the acquisition, may incur higher-than-expected transaction and integration costs, may assume unknown liabilities and may experience general economic and business conditions that adversely affect the combined company following the acquisition. These assumptions relate to numerous matters, including:

- projections of X-spine's future results;
- our expected capital structure after the acquisition;
- the amount of goodwill and intangibles that will result from the acquisition;
- certain other purchase accounting adjustments that we expect will be recorded in our financial statements in connection with the acquisition;
- cost, cross-selling and balance sheet synergies;
- acquisition costs, including restructuring charges and transaction costs;
- our ability to maintain, develop and deepen relationships with X-spine's customers; and
- other financial and strategic risks of the acquisition.

There may be risks associated with the post-acquisition integration of X-spine, because X-spine has historically been operated as a privately owned company.

There may be risks associated with the post-acquisition integration of X-spine, because X-spine has historically been operated as a privately owned company. Public companies are subject to significant additional regulatory and reporting requirements. Senior management of public companies may be required to

devote more of their time to meeting these additional requirements. X-spine's senior management has historically been actively involved in the revenue-generating activities of its operations. If these individuals are required to devote more time to the additional requirements of managing a public company, and we are unable to successfully transition some or all of their direct revenue-generating responsibilities to other suitable professionals, our business, results of operations and financial condition may suffer.

Our ability to use our net operating loss carry-forwards to offset future taxable income may become limited.

Section 382 of the Internal Revenue Code of 1986, as amended (the “Code”), imposes restrictions on the use of a corporation’s net operating losses, as well as certain recognized built-in losses and other carryforwards, after an “ownership change” occurs. A Section 382 “ownership change” occurs if one or more stockholders or groups of stockholders who own at least 5% of our stock (including certain “public groups” deemed created for Section 382 purposes) increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. It is possible that the issuance of common stock upon conversion of the notes could result in an ownership change under Section 382, and there can be no assurance that this will not happen. If an “ownership change” occurs, Section 382 would impose an annual limit on the amount of pre-change net operating losses and other losses we can use to reduce our taxable income generally equal to the product of the total value of our outstanding equity immediately prior to the “ownership change” (subject to certain adjustments) and the applicable federal long-term tax-exempt interest rate for the month of the “ownership change.”

Because U.S. federal net operating losses generally may be carried forward for up to 20 years, the annual limitation may effectively provide a cap on the cumulative amount of pre-ownership change losses, including certain recognized built-in losses that may be utilized. Such pre-ownership change losses in excess of the cap may be lost. In addition, if an ownership change were to occur, it is possible that the limitations imposed on our ability to use pre-ownership change losses and certain recognized built-in losses could cause a net increase in our U.S. federal income tax liability and U.S. federal income taxes to be paid earlier than otherwise would be paid if such limitations were not in effect. Further, if for financial reporting purposes the amount or value of these deferred tax assets is reduced, such reduction could negatively impact the book value of our common stock.

We may not be able to deduct all or a portion of the interest payments on the notes for U.S. federal income tax purposes.

The deduction for all or a portion of the interest paid or incurred on indebtedness classified as “corporate acquisition indebtedness” for U.S. federal income tax purposes may be disallowed. A convertible debt instrument may be classified as “corporate acquisition indebtedness” under the Code if the proceeds thereof are used, directly or indirectly, to finance an acquisition and certain other conditions are met. The convertible notes we issued to finance a portion of the acquisition may be treated as corporate acquisition indebtedness. Accordingly, the deduction for all or a portion of the interest paid or incurred on the notes may be disallowed. If we were not entitled to deduct interest on the notes, our after-tax operating results could be adversely affected.

Risks Related to X-spine’s Business

We have limited experience with X-spine’s product lines.

X-spine’s product lines are new to us, and we have limited experience with them. X-spine’s business is concentrated on developing and manufacturing implants and surgical instruments for surgery of the spine, which business differs from ours. As a result, X-spine’s business is comprised of different product lines with which we have limited experience.

We will depend on retaining X-spine management and employees.

We will also be highly dependent on the continued services of key members of X-spine’s executive management team. The loss of any one of these individuals could disrupt X-spine’s operations or strategic plans. Additionally, X-spine’s future success will depend on, among other things, our ability to hire and retain the necessary qualified scientific, technical, sales, marketing and managerial personnel, for whom X-spine competes with numerous other companies, academic institutions and organizations. The loss of members of X-spine’s management team, key advisors or personnel, or X-spine’s inability to attract or retain other qualified personnel or advisors, could have a material adverse effect on X-spine’s business, results of operations and financial condition.

X-spine's business depends, in part, on a key distributor arrangement.

X-spine's business is dependent, in part, on a key distributor arrangement. For the year ended December 31, 2014, net sales to this one distributor, Zimmer, exceeded 10% of X-spine's net sales. X-spine's results of operations are directly dependent on the sales and marketing efforts of its distributors and other sales agents and employees. If X-spine's key distributor were to reduce its efforts or cease to do business with X-spine, X-spine's sales could be adversely affected. In such a situation, X-spine may need to seek alternative distributors or increase its reliance on existing direct sales employees, sales agent and other distributors, which we may be unable to do in a timely and efficient manner, if at all.

X-spine's business depends, in part, on a relationship with a key supplier, which is a related party.

X-spine relies on third-party suppliers to supply substantially all of its products. For X-spine to be successful, its suppliers must be able to provide it with products in substantial quantities, in compliance with regulatory requirements, in accordance with agreed-upon specifications, at acceptable costs and on a timely basis. If X-spine is unable to obtain sufficient quantities of high quality products to meet demand on a timely basis, it may lose customers, and our business and reputation may suffer.

Certain of X-spine's former shareholders, who now own over 10% of our common stock, own a controlling share of X-spine's largest supplier, Norwood Tool Company d/b/a Norwood Medical. In 2013 and 2014, products purchased from Norwood Medical accounted for approximately 35% and 22% of product purchases, respectively. X-spine's dependence on Norwood Medical exposes us to risks, including limited control over pricing, availability and delivery schedules. If Norwood Medical ceases to provide X-spine with sufficient quantities of products in a timely manner or on terms acceptable to X-spine, or ceases to manufacture products of acceptable quality, X-spine would have to seek alternate sources of supply. Because of the nature of X-spine's regulatory and quality control requirements, and the proprietary nature of its products, it may not be able to quickly engage additional or replacement suppliers. Any such disruption could harm X-spine's business, results of operations or financial condition.

Risks Related to our Business

Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flow from our business to pay our substantial debt.

Our ability to service our debt depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate cash flow from operations in the future sufficient to service our debt and other fixed charges, fund working capital needs and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

We may not be able to meet financial or other covenant requirements in our credit facility, and we may not be able to successfully negotiate waivers to cure any covenant violations.

Our credit agreement with affiliates of OrbiMed contains representations, warranties, fees, affirmative and negative covenants, including a minimum cash balance, a leverage ratio and minimum revenue amounts by quarter, and default provisions, which include departures in key management, if not remedied within 90 days. A breach of any of these covenants could result in a default under these agreements. Upon the occurrence of an event of default under our debt agreements, our lender could elect to declare all amounts outstanding to be immediately due and payable and terminate all commitments to extend further credit. If our lender accelerates the repayment of borrowings, we may not have sufficient assets to repay our indebtedness. Also, should there be an event of default, or should we need to obtain waivers following an event of default, we may be subject to higher borrowing costs and/or more restrictive covenants in future periods. In addition, to secure the performance of our obligations under the credit facility, we pledged substantially all of our assets, including our intellectual property, to affiliates of OrbiMed. Our failure to comply with the covenants under the credit facility could result in an event of default, the acceleration of our debt and the loss of our assets.

Affiliates of OrbiMed may be able to exert significant influence over the Company.

Certain private investment funds for which OrbiMed Advisors LLC serves as the investment manager purchased \$52 million of the Notes in our recent offering. In addition, affiliates of OrbiMed are significant shareholders and we owe affiliates of OrbiMed approximately \$42 million in principal, plus interest and exit fees, pursuant to our Amended and Restated Credit Agreement. Accordingly, OrbiMed may be able to exert significant influence over the Company. Although OrbiMed has been a strong supporter of the Company, OrbiMed may have interests that differ, or, in some cases, conflict with, interests of other shareholders.

We may need to use 50% of the net proceeds from future offerings to make a mandatory prepayment on our loan.

Subject to the discretion of our lender, our credit agreement with affiliates of OrbiMed includes an obligation on our part to use 50% of the net proceeds from equity offerings above \$50 million in the aggregate to make a mandatory prepayment on our loan. This provision could reduce the net proceeds to us in future financing transactions, which may affect our ability to raise capital in the future.

We are not currently profitable and we will need to raise additional funds in the future; however, additional funds may not be available on acceptable terms, or at all.

We have substantial operating expenses associated with the sales and marketing of our products. The sales and marketing expenses are anticipated to be funded from operating cash flow. There can be no assurance that we will have sufficient access to liquidity or cash flow to meet our operating expenses and other obligations. If we do not increase our revenue or reduce our expenses, we may need to raise additional capital, which would 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 result in our inability to pay our expenses as they come due, limit our ability to expand our business operations, and harm our overall business prospects.

We may not be able to raise capital or, if we can, it may not be on favorable terms. We may seek to raise additional capital through public or private equity financings, partnerships, joint ventures, disposition of assets, debt financings or restructuring, bank borrowing or other sources. To obtain additional funding, we may need to enter into arrangements that require us to relinquish rights to certain technologies, products and/or potential markets. If adequate funds are not otherwise available, we would be forced to curtail operations significantly, including reducing our sales and marketing expenses which could negatively impact product sales and we could even be forced to cease operations, liquidate our assets and possibly even seek bankruptcy protection.

The impact of United States healthcare reform legislation remains uncertain.

In 2010, federal legislation, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively "PPACA"), to reform the United States healthcare system was enacted into law. Certain aspects of the law were upheld by a Supreme Court decision announced in June 2012 and in June 2015. PPACA is far-reaching and is intended to expand access to health insurance coverage, improve quality and reduce costs over time. Among other things, the PPACA imposes a 2.3 percent excise tax on medical devices, which applies to United States sales of our medical device products, including our OsteoSelect® DBM putty. X-spine products also are subject to this excise tax. Due to multi-year pricing agreements and competitive pricing pressure in our industry, there can be no assurance that we will be able to pass the cost of the device tax on to our customers. Other provisions of the law, including Medicare provisions aimed at improving quality and decreasing costs, comparative effectiveness research, an independent payment advisory board, and pilot programs to evaluate alternative payment methodologies, could meaningfully change the way healthcare is developed and delivered. We cannot predict the impact of this legislation or other healthcare programs and regulations that may ultimately be implemented at the federal or state level, the effect of any future legislation or regulation in the United States or internationally or whether any changes will have the effect of lowering prices for our products or reducing medical procedure volumes.

We cannot predict the impact of other healthcare programs and regulations that may ultimately be implemented at the federal or state level, the effect of any future legislation or regulation in the United States or internationally or whether any changes will have the effect of lowering prices for our products or reducing medical procedure volumes.

We are subject, directly and indirectly, to federal and state healthcare fraud and abuse laws, false claims laws, and physician payment transparency laws. Failure to comply with these laws may subject us to substantial penalties.

We are subject to federal and state healthcare laws and regulations pertaining to fraud and abuse, and physician payment transparency. These laws include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs, such as the Medicare and Medicaid programs. A person or entity does not need to have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it to have committed a violation. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;
- federal false claims laws which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid or other federal third-party payors that are false or fraudulent;
- federal criminal laws that prohibit executing a scheme to defraud any federal healthcare benefit program or making false statements relating to healthcare matters;
- the federal Physician Payment Sunshine Act, which requires manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program (with certain exceptions) to report annually to the Centers for Medicare & Medicaid Services, or CMS, information related to payments or other “transfers of value” made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, and requires applicable manufacturers and group purchasing organizations to report annually to CMS ownership and investment interests held by the physicians described above and their immediate family members and payments or other “transfers of value” to such physician owners; and
- analogous state and foreign law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers; state laws that require device companies to comply with the industry’s voluntary compliance guidelines and the applicable compliance guidance promulgated by the federal government or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws that require device manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available under such laws, it is possible that some of our business activities, including our relationships with customers, physicians and other healthcare providers, some of whom have ownership interests in the company and recommend and/or use our products, could be subject to challenge under one or more of such laws. We are also exposed to the risk that our employees, independent contractors, principal investigators, consultants, vendors, and distributors may engage in fraudulent or other illegal activity. Misconduct by these parties could include, among other infractions or violations, intentional, reckless and/or negligent conduct or unauthorized activity that violates FDA regulations, manufacturing standards, federal and state healthcare fraud and abuse laws and regulations, laws that require the true, complete and accurate reporting of financial information or data or other commercial or regulatory laws or requirements. It is not always possible to identify and deter misconduct by our employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations.

Because of the nature of our business, we are involved from time to time in lawsuits, claims, audits and investigations, including whistleblower actions by private parties and subpoenas from governmental agencies such as the Office of Inspector General of the Department of Health and Human Services (“OIG”). In February 2013, we received a subpoena from the OIG seeking documents in connection with an investigation into possible false or otherwise improper claims submitted to Medicare. The subpoena requested documents related to physician referral programs operated by the Company, which we believe refers to the Company’s prior practice of compensating physicians for performing certain educational and promotional services on behalf of the Company during 2009 and 2010. We later learned that this subpoena resulted from a qui tam action that was dismissed without prejudice in 2013 after the Department of Justice declined to intervene.

If our operations are found to violate any of the laws described above or any other laws and regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, the curtailment or restructuring of our operations, the exclusion from participation in federal and state healthcare programs and imprisonment, any of which could adversely affect our ability to market our products and materially adversely affect our business, results of operations and financial condition. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management’s attention from the operation of our business.

Pricing pressure and cost containment measures could have a negative impact on our future operating results.

Pricing pressure has increased in our industry due to continued consolidation among healthcare providers, trends toward managed care, the shift towards government becoming the primary payor of healthcare expenses, and government laws and regulations relating to reimbursement and pricing generally. Pricing pressure, reductions in reimbursement levels or coverage or other cost containment measures could unfavorably affect our future operating results and financial condition.

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

Our business is in a very competitive and evolving field. Rapid new developments in this field have occurred over the past few years, and are expected to continue to occur. Other companies already have competing products available or may develop products to compete with ours. Many of these products have short regulatory timeframes and our competitors, many with more substantial development resources, may be able to develop competing products that are equal to or better than ours. This may make our products obsolete or undesirable by comparison and reduce our revenue. Our success will depend, in large part, on our ability to maintain a competitive position concerning our intellectual property, and to develop new technologies and new applications for our technologies. Many of our competitors have substantially greater financial and technical resources, as well as greater production and marketing capabilities, and our ability to compete remains uncertain.

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

Members of the medical community and the general public may perceive synthetic materials and growth factors as safer than our allograft-based bone tissue products. Our products may be incapable of competing successfully with synthetic bone graft substitutes and growth factors developed and commercialized by others, which could have a material adverse effect on our business, financial condition and results of operations.

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

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

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

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

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

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

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

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

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

We are highly dependent on the services of key members of our management team, and the loss of any of their services could have an adverse effect on our future operations. We do not currently maintain key-man life insurance policies insuring the life of any member of our management team.

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

Any failure in the physical infrastructure of our facilities or services could lead to significant costs and disruptions that could reduce our revenues and harm our business reputation and financial results. We are highly reliant on our Belgrade, Montana facilities. Any natural or man-made event that impacts our ability to utilize these facilities could have a significant impact on our operating results, reputation and ability to continue operations. The regulatory process for approval of facilities is time-consuming and our ability to rebuild facilities would take a considerable amount of time and expense and cause a significant disruption in service to our customers. Further, the FDA or some other regulatory agency could identify deficiencies in future inspections of our facilities or our supplies that could disrupt our business, reducing profitability.

Future revenue will depend on our ability to increase sales.

We currently sell our products through direct sales by our employees and indirectly through distributor relationships. We incurred increased sales and marketing expenses in building and expanding our direct sales force, and there can be no assurance that we will generate increased sales as a result of this effort.

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

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

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

Political, economic and regulatory influences are subjecting the healthcare industry in the United States to fundamental change. The ability of hospitals to pay fees for allograft bone tissue products depends in part on the extent to which reimbursement for the costs of such materials and related treatments will continue to be available from governmental health administration authorities, private health coverage insurers and other organizations. In the United States, healthcare providers who purchase our products generally rely on these third-party payors to pay for all or a portion of the cost of our products in the procedures in which they are employed. Because there is often no separate reimbursement for our products, the additional cost associated with the use of our products can impact the profit margin of the hospital or other health care facility where the surgery is performed. Some of our target customers may be unwilling to purchase our products if they are able to procure less expensive alternatives. In addition, major third-party payors of hospital services and hospital outpatient services, including Medicare, Medicaid and private healthcare insurers, annually revise their payment methodologies, which can result in stricter standards for reimbursement of hospital charges for certain medical procedures or the elimination of or reduction in reimbursement. Further, Medicare, Medicaid and private healthcare insurer cutbacks could create downward price pressure on our products.

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

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

The results of our clinical studies may not support our product candidate claims or may result in the discovery of adverse effects.

Our ongoing research and development, pre-clinical testing and clinical study activities are subject to extensive regulation and review by numerous governmental authorities both in the United States and abroad. We are currently conducting post-market clinical studies of some of our products to gather information about these products' performance or optimal use. Additionally, in the future we may conduct clinical studies to support clearance or approval of new products. Clinical studies must be conducted in compliance with FDA regulations and local regulations, and according to principles and standards collectively referred to as "Good Clinical Practices." Non-compliance could result in regulatory and legal enforcement action and also could invalidate the data. Even if our clinical studies are completed as planned, we cannot be certain that their results will support our product candidates and/or proposed claims or that the FDA or foreign authorities and notified bodies will agree with our conclusions regarding them. Success in pre-clinical studies and early clinical studies does not ensure that later clinical studies will be successful, and we cannot be sure that the results of the later studies will replicate those of earlier or prior studies. The clinical trial process may fail to demonstrate that our product candidates are safe and effective for the proposed indicated uses, which could cause us to abandon a product candidate and may delay development of others. Any delay or termination of our clinical studies will delay the filing of our product submissions and, ultimately, our ability to commercialize our product candidates and generate revenues. It is also possible that patient subjects enrolled in our clinical studies of our marketed products will experience adverse side effects that are not currently part of the product candidate's profile and, if so, these findings may result in lower market acceptance, which could have a material and adverse effect on our business, results of operations and financial condition.

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

Although we are not currently subject to any product liability proceedings, we have no reserves for product liability disbursements, and we may incur material liabilities relating to product liability claims in the future, including product liability claims arising out of the use of our products. We currently carry product liability insurance, however, our insurance coverage and any reserves we may maintain in the future for product related liabilities may not be adequate and our business could suffer material adverse consequences.

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

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

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

If we fail to maintain regulatory approvals and clearances, or are unable to obtain, or experience significant delays in obtaining, FDA clearances or approvals for our future products or product enhancements, our ability to commercially distribute and market these products could suffer.

Our products are subject to rigorous regulation by the FDA and numerous other federal, state and foreign governmental authorities. Certain of our products are regulated as medical devices by the FDA while others are regulated by the FDA as tissues. The process of obtaining regulatory clearances or approvals to market a medical device can be costly and time consuming, and we may not be able to obtain these clearances or approvals on a timely basis, if at all. In particular, the FDA permits commercial distribution of a new medical device only after the device has received clearance under Section 510(k) of the Federal Food, Drug and Cosmetic Act, or is the subject of an approved premarket approval application, or PMA, unless the device is specifically exempt from those requirements.

The FDA will clear marketing of a lower risk medical device through the 510(k) process if the manufacturer demonstrates that the new product is substantially equivalent to a legally marketed device that is not subject to the PMA process, which includes devices that were legally marketed prior to May 28, 1976 ("pre-amendments devices") for which the FDA has not called for a PMA, devices that have been reclassified from Class III to Class II or I, or devices that have been found substantially equivalent through the 510(k) process. High risk devices deemed to pose the greatest risk, such as life-sustaining, life-supporting, or implantable devices, or devices not deemed substantially equivalent to a previously cleared device, require the approval of a PMA. The PMA process is more costly, lengthy and uncertain than the 510(k) clearance process. A PMA application must be supported by extensive data, including, but not limited to, technical, preclinical, clinical trial, manufacturing and labeling data, to demonstrate to the FDA's satisfaction the safety and efficacy of the device for its intended use.

Our failure to comply with U.S. federal, state and foreign governmental regulations could lead to the issuance of warning letters or untitled letters, the imposition of injunctions, suspensions or loss of regulatory clearance or approvals, product recalls, termination of distribution, product seizures or civil penalties. In the most extreme cases, criminal sanctions or closure of our manufacturing facility are possible.

Modifications to our products may require new regulatory clearances or approvals or may require us to recall or cease marketing our products until clearances or approvals are obtained.

Modifications to our products may require new regulatory approvals or clearances, including 510(k) clearances, premarket approvals, or require us to recall or cease marketing the modified devices until these clearances or approvals are obtained. The FDA requires device manufacturers to initially make and document a determination of whether or not a modification requires a new approval, supplement or clearance. A manufacturer may determine that a modification could not significantly affect safety or efficacy and does not represent a major change in its intended use, so that no new 510(k) clearance is necessary. However, the FDA can review a manufacturer's decision and may disagree. The FDA may also on its own initiative determine that a new clearance or approval is required. We have made modifications to our products in the past and may make additional modifications in the future that we believe do not or will not require additional clearances or approvals. If the FDA disagrees and requires new clearances or approvals for the modifications, we may be required to recall and to stop marketing our products as modified, which could require us to redesign our products and harm our operating results. In these circumstances, we may be subject to significant enforcement actions.

If a manufacturer determines that a modification to an FDA-cleared device could significantly affect its safety or efficacy, or would constitute a major change in its intended use, then the manufacturer must file for a new 510(k) clearance or possibly a premarket approval application. Where we determine that modifications to our products require a new 510(k) clearance or premarket approval, we may not be able to obtain those additional clearances or approvals for the modifications or additional indications in a timely manner, or at all. Obtaining clearances and approvals can be a time consuming process, and delays in obtaining required future clearances or approvals would adversely affect our ability to introduce new or enhanced products in a timely manner, which in turn would harm our future growth.

There is no guarantee that the FDA will grant 510(k) clearance or PMA approval of our future products and failure to obtain necessary clearances or approvals for our future products would adversely affect our ability to grow our business.

Future products may require FDA clearance of a 510(k) or approval of a PMA. In addition, future products may require clinical trials to support regulatory approval and we may not successfully complete these clinical trials. The FDA may not approve or clear these products for the indications that are necessary or desirable for successful commercialization. Indeed, the FDA may refuse our requests for 510(k) clearance or premarket approval of new products. Failure to receive clearance or approval for our new products would have an adverse effect on our ability to expand our business.

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

Clinical trials are generally required to support a PMA application and are sometimes required for 510(k) clearance. Such trials generally require an investigational device exemption application, or IDE, approved in advance by the FDA for a specified number of patients and study sites, unless the product is deemed a nonsignificant risk device eligible for more abbreviated IDE requirements. Clinical trials are subject to extensive monitoring, recordkeeping and reporting requirements. Clinical trials must be conducted under the oversight of an institutional review board, or IRB, for the relevant clinical trial sites and must comply with FDA regulations, including but not limited to those relating to good clinical practices. To conduct a clinical trial, we also are required to obtain the patients' informed consent in form and substance that complies with both FDA requirements and state and federal privacy and human subject protection regulations. We, the FDA or the IRB could suspend a clinical trial at any time for various reasons, including a belief that the risks to study subjects outweigh the anticipated benefits. In addition, the commencement or completion of any clinical trial may be delayed or halted for numerous reasons, including, but not limited to patients not enrolling in clinical trials at the rate we expect, patients experiencing adverse side effects, third party contractors failing to perform in accordance with our anticipated schedule or consistent with good clinical practices, inclusive or negative interim trial results or our inability to obtain sufficient quantities of raw materials to produce our products. Clinical trials often take several years to execute. The outcome of any trial is uncertain and may have a significant impact on the success of our current and future products and future profits. Our development costs may increase if we have material delays in clinical trials or if we need to perform more or larger clinical trials than planned. If this occurs, our financial results and the commercial prospects for our products may be harmed. Even if a trial is completed, the results of clinical testing may not adequately demonstrate the safety and efficacy of the device or may otherwise not be sufficient to obtain FDA approval to market the product in the United States.

Even if our medical device products are cleared or approved by regulatory authorities, if we or our suppliers fail to comply with ongoing FDA or other foreign regulatory authority requirements, or if we experience unanticipated problems with our products, these products could be subject to restrictions or withdrawal from the market.

Any product that we market, and the manufacturing processes, reporting requirements, post-approval clinical data and promotional activities for such product, will be subject to continued regulatory review, oversight and periodic inspections by the FDA and other domestic and foreign regulatory bodies. In particular, we and our suppliers are required to comply with the FDA's current good manufacturing practice, or GMP requirements, known as the Quality System Regulation, or QSR, for medical devices, and International Standards Organization, or ISO, regulations for the manufacture of our products and other regulations which cover the methods and documentation of the design, testing, production, control, quality assurance, labeling, packaging, storage and shipping of any product. Regulatory bodies, such as the FDA, enforce these and other regulations through periodic inspections. The failure by us or one of our suppliers to comply with applicable statutes and regulations administered by the FDA and other regulatory bodies, or the failure to timely and adequately respond to any adverse inspectional observations or product safety issues, could result in, among other things, any of the following enforcement actions:

- untitled letters, warning letters, fines, injunctions, consent decrees and civil penalties;
- unanticipated expenditures to address or defend such actions;
- customer notifications for repair, replacement, refunds;
- recall, detention or seizure of our products;
- operating restrictions or partial suspension or total shutdown of production;
- refusing or delaying our requests for 510(k) clearance or premarket approval of new medical device products or modified medical device products;
- operating restrictions;
- withdrawing 510(k) clearances or PMA approvals that have already been granted;
- refusal to grant export approval for our products; or
- criminal prosecution.

If any of these actions were to occur it would harm our reputation and cause our product sales and profitability to suffer and may prevent us from generating revenue. Furthermore, our key component suppliers may not currently be or may not continue to be in compliance with all applicable regulatory requirements, which could result in our failure to produce our products on a timely basis and in the required quantities, if at all.

Even if regulatory clearance or approval of a product is granted, such clearance or approval may be subject to limitations on the intended uses for which the product may be marketed and reduce our potential to successfully commercialize the product and generate revenue from the product. If the FDA determines that our promotional materials, labeling, training or other marketing or educational activities constitute promotion of an unapproved use, it could request that we cease or modify our training or promotional materials or subject us to regulatory enforcement actions. It is also possible that other federal, state or foreign enforcement authorities might take action if they consider our training or other promotional materials to constitute promotion of an unapproved use, which could result in significant fines or penalties under other statutory authorities, such as laws prohibiting false claims for reimbursement.

In addition, we may be required to conduct costly post-market testing and surveillance to monitor the safety or effectiveness of our products, and we must comply with medical device reporting requirements, including the reporting of certain adverse events and malfunctions related to our products. Later discovery of previously unknown problems with our products, including unanticipated adverse events or adverse events of unanticipated severity or frequency, manufacturing problems, or failure to comply with regulatory requirements such as QSR, may result in changes to labeling, restrictions on such products or manufacturing processes, withdrawal of the products from the market, voluntary or mandatory recalls, a requirement to repair, replace or refund the cost of any medical device we manufacture or distribute, fines, suspension of regulatory approvals, product seizures, injunctions or the imposition of civil or criminal penalties which would adversely affect our business, operating results and prospects.

We face risks and uncertainties relating to an ongoing inspection and Warning Letter.

We received two warning letters from the FDA dated January 28, 2013 following inspections in July 2012 of two of our facilities, one concerning the facility located at 600 Cruiser Lane, Belgrade, Montana (“Site 600”) and one concerning the facility located at 664 Cruise Lane, Belgrade, Montana (“Site 664”). The Site 664 warning letter has been formally closed out by the FDA, while the Site 600 warning letter remains open. The Site 600 warning letter addressed issues regarding aspects of Bacterin’s quality system with a focus on OsteoSelect DBM Putty which is both a tissue and a device, and which is marketed pursuant to a section 510(k) clearance. We responded to this warning letter on February 2, 2013, and provided periodic response updates on March 20, 2013, April 15, 2013 and May 20, 2013. We developed and implemented a corrective action strategy that we believe addressed all of the FDA’s concerns. While we have implemented a corrective action strategy that we believe addresses all of the FDA’s concerns, there is a chance that the FDA will not agree with our proposed corrective actions. If the FDA does not agree with our proposed actions, they could issue another warning letter, request that we take additional actions, or take additional enforcement actions. The FDA conducted a re-inspection of Site 600 from July 8, 2013 to July 12, 2013, which evaluated the completion of the corrective actions and resulted in the issuance of an unrelated FDA-Form 483 on July 12, 2013. We responded to the FDA-Form 483 on August 1, 2013, and provided periodic response updates on August 13, 2013, September 26, 2013, October 31, 2013 and December 4, 2013. On October 29, 2013, we received an Establishment Inspection Report (EIR) for this re-inspection. At this time, we do not know whether or when the FDA will conduct an additional follow up inspection. In addition, from July 22, 2013 to August 2, 2013, the FDA conducted a tissue-focused inspection of Site 600 which resulted in an FDA-Form 483. We responded to the FDA-Form 483 on August 22, 2013. At this time, we do not know whether this inspection will lead to an enforcement action or when the FDA will close out this inspection.

If our products cause or contribute to a death or a serious injury, or malfunction in certain ways, we will be subject to medical device reporting regulations, which can result in voluntary corrective actions or agency enforcement actions.

Under the FDA medical device reporting regulations, medical device manufacturers are required to report to the FDA information that a device has or may have caused or contributed to a death or serious injury or has malfunctioned in a way that would likely cause or contribute to death or serious injury if the malfunction of the device or one of our similar devices were to recur. Under the FDA’s reporting regulations applicable to human cells and tissue and cellular and tissue-based products, or HCT/Ps, we are required to report all adverse reactions involving a communicable disease if it is fatal, life threatening, or results in permanent impairment of a body function or permanent damage to body structure. If we fail to report these events to the FDA within the required timeframes, or at all, the FDA could take enforcement action against us. Any such adverse event involving our products also could result in future voluntary corrective actions, such as recalls or customer notifications, or agency action, such as inspection or enforcement action. Any corrective action, whether voluntary or involuntary, as well as defending ourselves in a lawsuit, would require the dedication of our time and capital, distract management from operating our business, and may harm our reputation and financial results.

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

The FDA and similar foreign governmental authorities have the authority to require the recall of commercialized products in the event of material deficiencies or defects in design or manufacture. In the case of the FDA, the authority to require a recall must be based on an FDA finding that there is a reasonable probability that the device would cause serious injury or death. In addition, foreign governmental bodies have the authority to require the recall of our products in the event of material deficiencies or defects in design or manufacture. Manufacturers may, under their own initiative, recall a product if any material deficiency in a device is found. A government-mandated or voluntary recall by us or one of our distributors could occur as a result of component failures, manufacturing errors, design or labeling defects or other deficiencies and issues. Recalls of any of our products would divert managerial and financial resources and have an adverse effect on our financial condition and results of operations. The FDA requires that certain classifications of recalls be reported to the FDA within 10 working days after the recall is initiated. Companies are required to maintain certain records of recalls, even if they are not reportable to the FDA. We may initiate voluntary recalls involving our products in the future that we determine do not require notification of the FDA. If the FDA disagrees with our determinations, they could require us to report those actions as recalls. A future recall announcement could harm our reputation with customers and negatively affect our sales. In addition, the FDA could take enforcement action for failing to report the recalls when they were conducted.

We may be subject to fines, penalties or injunctions if we are determined to be promoting the use of our products for unapproved or “off-label” uses.

Our promotional materials and training methods for physicians must comply with the FDA and other applicable laws and regulations. We believe that the specific surgical procedures for which our products are marketed fall within the scope of the surgical applications that have been cleared by the FDA. However, the FDA could disagree and require us to stop promoting our products for those specific procedures until we obtain FDA clearance or approval for them. In addition, if the FDA determines that our promotional materials or training constitutes promotion of an unapproved use, it could request that we modify our training or promotional materials or subject us to regulatory or enforcement actions, including the issuance of an untitled letter, a warning letter, injunction, seizure, civil fine and criminal penalties. It is also possible that other federal, state or foreign enforcement authorities might take action if they consider our promotional or training materials to constitute promotion of an unapproved use, which could result in significant fines or penalties under other statutory authorities, such as laws prohibiting false claims for reimbursement. In that event, our reputation could be damaged and adoption of the products would be impaired.

If we or our suppliers fail to comply with ongoing FDA or other regulatory authority requirements pertaining to Human Tissue Products, these products could be subject to restrictions or withdrawal from the market.

Certain of our products are regulated as HCT/Ps and are not marketed pursuant to the FDA’s medical device regulatory authority, and therefore are not subject to FDA clearance or approval. Although we have not obtained premarket approval for these products, they are nonetheless subject to regulatory oversight. Human tissues intended for transplantation have been regulated by the FDA since 1993. Over the course of several years, the FDA issued comprehensive regulations that address manufacturer activities associated with HCT/Ps. The first requires that companies that produce and distribute HCT/Ps register with the FDA. This set of regulations also includes the criteria that must be met in order for the HCT/P to be eligible for marketing solely under Section 361 of the PHS Act and the regulations in 21 CFR Part 1271, rather than under the drug or device provisions of the FD&C Act or the biological product licensing provisions of the PHS Act. The second set of regulations provides criteria that must be met for donors to be eligible to donate tissues and is referred to as the “Donor Eligibility” rule. The third rule governs the processing and distribution of the tissues and is often referred to as the “Current Good Tissue Practices” rule. The “Current Good Tissue Practices” rule covers all stages of allograft processing, from procurement of tissue to distribution of final allografts. Together these regulations are designed to ensure that sound, high quality practices are followed to reduce the risk of tissue contamination and of communicable disease transmission to recipients.

These regulations increased regulatory scrutiny within the industry in which we operate and have led to increased enforcement action which affects the conduct of our business. In addition, these regulations can increase the cost of tissue recovery activities. The FDA periodically inspects tissue processors to determine compliance with these requirements. Violations of applicable regulations noted by the FDA during facility inspections could adversely affect the continued marketing of our products. We believe we comply with all aspects of the Current Good Tissue Practices, although there can be no assurance that we will comply, or will comply on a timely basis, in the future. Entities that provide us with allograft bone tissue are responsible for performing donor recovery, donor screening and donor testing and our compliance with those aspects of the Current Good Tissue Practices regulations that regulate those functions are dependent upon the actions of these independent entities. If our suppliers fail to comply with applicable requirements, our products and our business could be negatively affected. If the FDA determines that we have failed to comply with applicable regulatory requirements, it can impose a variety of enforcement actions from public warning letters, fines, injunctions, consent decrees and civil penalties to suspension or delayed issuance of approvals, seizure of our products, total or partial shutdown of our production, withdrawal of approvals, and criminal prosecutions. If any of these events were to occur, it could materially adversely affect us.

In addition, the FDA could disagree with our conclusion that some of our HCT/Ps meet the criteria for marketing solely under Section 361 of the PHS Act, and therefore do not require approval or clearance of a marketing application. For our HCT/Ps that are not combined with another article, the FDA could conclude that the tissue is more than minimally manipulated, that the product is intended for a non-homologous use, or that the product has a systemic effect or is dependent on the metabolic activity of living cells for its effect. If the FDA were to draw these conclusions, it would likely require the submission and approval or clearance of a marketing application in order for us to continue to market the product. Such an action by the FDA could cause negative publicity, decreased or discontinued product sales, and significant expense in obtaining required marketing approval or clearance.

Other regulatory entities with authority over our products and operations include state agencies enforcing statutes and regulations covering tissue banking. Regulations issued by Florida, New York, California and Maryland will be particularly relevant to our business. Most states do not currently have tissue banking regulations. It is possible that others may make allegations against us or against donor recovery groups or tissue banks about non-compliance with applicable FDA regulations or other relevant statutes or regulations.

Allegations like these could cause regulators or other authorities to take investigative or other action, or could cause negative publicity for our business and the industry in which we operate.

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

Loss of AATB Accreditation would have a material adverse effect on us.

We are accredited with the American Association of Tissue Banks ("AATB"), a private non-profit organization that accredits tissue banks and sets industry standards. Although AATB accreditation is voluntary and not required by law, as a practical matter, many of our customers would not purchase our products if we failed to maintain our AATB accreditation. Although we make every effort to maintain our AATB accreditation, the accreditation process is somewhat subjective and lacks regulatory oversight. There can be no assurance that we will continue to remain accredited with the AATB.

Federal regulatory reforms may adversely affect our ability to sell our products profitably.

From time to time, legislation is drafted and introduced in Congress that could significantly change the statutory provisions governing the regulatory approval, manufacture and marketing of regulated products or the reimbursement thereof. In addition, FDA regulations and guidance are often revised or reinterpreted by the FDA in ways that may significantly affect our business and our products. Any new regulations or revisions or reinterpretations of existing regulations may impose additional costs or lengthen review times of future products. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency in ways that may significantly affect our business and our products. It is impossible to predict whether legislative changes will be enacted or FDA regulations, guidance or interpretations changed, and what the impact of such changes, if any, may be.

For example, the FDA may change its clearance and approval policies, adopt additional regulations or revise existing regulations, or take other actions which may prevent or delay approval or clearance of our products under development or impact our ability to modify our currently cleared products on a timely basis. For example, in 2011, the FDA initiated a review of the premarket clearance process in response to internal and external concerns regarding the 510(k) program, announcing 25 action items designed to make the process more rigorous and transparent. In addition, as part of the Food and Drug Administration Safety and Innovation Act of 2012, Congress enacted several reforms entitled the Medical Device Regulatory Improvements and additional miscellaneous provisions which will further affect medical device regulation both pre- and post-clearance or approval. The FDA has implemented, and continues to implement, these reforms, which could impose additional regulatory requirements upon us and delay our ability to obtain new 510(k) clearances, increase the costs of compliance or restrict our ability to maintain our current clearances. For example, the FDA recently issued guidance documents intended to explain the procedures and criteria the FDA will use in assessing whether a 510(k) submission meets a minimum threshold of acceptability and should be accepted for review. Under the "Refuse to Accept" guidance, the FDA conducts an early review against specific acceptance criteria to inform 510(k) submitters if the submission is administratively complete, or if not, to identify the missing element(s). Submitters are given the opportunity to provide the FDA with the identified information, but if the information is not provided within a defined time, the submission will not be accepted for FDA review. Any change in the laws or regulations that govern the clearance and approval processes relating to our current and future products could make it more difficult and costly to obtain clearance or approval for new products, or to produce, market and distribute existing products. Significant delays in receiving clearance or approval, or the failure to receive clearance or approval for our new products would have an adverse effect on our ability to expand our business.

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

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

Failure of our information technology systems could disrupt our business.

Our operations depend on the continued performance of our information technology systems. Despite security measures and other precautions we have taken, our information technology systems are potentially vulnerable to physical or electronic break-ins, computer viruses and similar disruptions. Sustained failure of our information technology systems could disrupt our business operations. In addition, some of our contracts impose obligations related to information we may have in physical or electronic formats, and any breach or failure of our information technology systems could result in breach of contract claims and other damages.

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

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

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

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

In addition to the risks involved with patent protection, we also face the risk that our competitors will infringe on our trademarks. Any infringement could lead to a likelihood of confusion and could result in lost sales. There can be no assurance that we will prevail in any claims we make to protect our intellectual property.

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

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

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

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

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

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

A third-party may claim an ownership interest in our intellectual property. While we believe we own 100% of the right, title and interest in the patents for which we have applied and our other intellectual property, including that which we license from third parties, we cannot guarantee that a third-party will not, at some time, assert a claim or an interest in any of such patents or intellectual property. A successful challenge or claim by a third party to our patents or intellectual property could have a significant adverse effect on our prospects.

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

We intend to vigorously defend any existing or future litigation that we may be involved in but there can be no assurance that we will prevail in these matters. An unfavorable judgment or settlement may result in a financial burden on us. An unfavorable judgment or settlement may also result in restrictions on our ability to sell certain products and therefore may impact future operating results. Moreover, costs, fees, expenses, settlement amounts, judgments or other liabilities associated with such matters may not be covered by our insurance and we may have to pay out-of-pocket.

Our common stock is not listed on a stock exchange.

In April of 2015, trading of our common stock moved from the NYSE MKT to the OTCQX marketplace due to insufficient shareholder equity. As a result, some shareholders may not wish to purchase or hold our common stock, and we may not be able to attract institutional investors in future financing transactions. In addition, because our common stock is no longer listed on a national securities exchange, we will not be eligible to utilize a Form S-3 registration statement (i) for a primary offering, if our public float is not at least \$75.0 million as of a date within 60 days prior to the date of filing the Form S-3, or a re-evaluation date, whichever is later, and (ii) to register the resale of our securities by persons other than us (*i.e.*, a resale offering). Because we are unable to utilize a Form S-3 registration statement for primary and secondary offerings of our common stock, we will be required to file a Form S-1 registration statement, which could delay our ability to raise funds in the future, may limit the type of offerings of common stock we could undertake, and could increase the expenses of any offering, as, among other things, registration statements on Form S-1 are subject to SEC review and comments whereas take downs pursuant to a previously effective Form S-3 are not. In addition, we are no longer subject to stock exchange shareholder approval requirements, which formerly required us to obtain shareholder approval before issuing 20% or more of our common stock in an acquisition or financing transaction, unless the transaction satisfied certain pricing requirements or was considered a “public offering”. Since we are no longer subject to such shareholder approval requirements, we could issue shares in excess of 20% of our outstanding shares in acquisitions or financing transactions without shareholder approval. Any such issuance would dilute the ownership of our current stockholders. In addition, we are no longer subject to the stock exchange rules requiring us to meet certain corporate governance standards, which could decrease investor interest in our common stock.

The market price of our common stock is extremely volatile, which may affect our ability to raise capital in the future and may subject the value of your investment to sudden decreases.

The market price for securities of biotechnology companies historically has been highly volatile, and the market from time to time has experienced significant price and volume fluctuations that are unrelated to the operating performance of such companies. Fluctuations in the trading price or liquidity of our common stock may harm the value of your investment in our securities.

Factors that may have a significant impact on the market price and marketability of our securities include:

- announcements of technological innovations or new commercial products by us, our collaborative partners or our present or potential competitors;

- our issuance of debt, equity or other securities, which we need to pursue to generate additional funds to cover our operating expenses;
- our quarterly operating results;
- developments or disputes concerning patent or other proprietary rights;
- developments in our relationships with employees, suppliers or collaborative partners;
- acquisitions or divestitures;
- litigation and government proceedings;
- adverse legislation, including changes in governmental regulation;
- third-party reimbursement policies;
- changes in securities analysts' recommendations;
- short selling;
- changes in health care policies and practices;
- suspension of trading of our common stock;
- economic and other external factors; and
- general market conditions.

In the past, following periods of volatility in the market price of a company's securities, securities class action litigation has often been instituted. These lawsuits often seek unspecified damages, and as with any litigation proceeding, one cannot predict with certainty the eventual outcome of pending litigation. Furthermore, we may have to incur substantial expenses in connection with any such lawsuits and our management's attention and resources could be diverted from operating our business as we respond to any such litigation. We maintain insurance to cover these risks for us and our directors and officers, but our insurance is subject to high deductibles, and there is no guarantee that the insurance will cover any specific claim that we currently face or may face in the future, or that it will be adequate to cover all potential liabilities and damages.

If securities analysts stop publishing research or reports about us or our business, or if they downgrade our common stock, the trading volume and market price of our common stock could decline.

The market for our common stock relies in part on the research and reports that industry or financial analysts publish about us or our business. We do not control these analysts. If any analyst who covers us downgrades our stock or lowers its future stock price targets or estimates of our operating results, our stock price could decline rapidly. Furthermore, if any analyst ceases to cover our company, we could lose visibility in the market. Each of these events could, in turn, cause our trading volume and the market price of our common stock to decline.

We do not anticipate, and may be prevented from, paying dividends in the foreseeable future.

We currently intend to retain our future earnings, if any, to support operations and to finance expansion and, therefore, we do not anticipate paying any cash dividends on our common stock in the foreseeable future. In addition, our amended and restated credit facility precludes us from paying dividends.

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

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

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

During the second quarter of 2015, pursuant to our previously disclosed Common Stock Purchase Agreement dated March 16, 2015, as amended and restated on April 17, 2015, with Aspire Capital and the related Registration Statement on Form S-1 declared effective on April 27, 2015, we issued 417,000 shares of our common stock to Aspire Capital for aggregate proceeds of \$1,387,439, which we used for working capital and general corporate purposes. The original issuance to Aspire Capital was exempt from registration under Section 4(a)(2) of the Securities Act of 1933, as a transaction that did not involve a public offering.

Item 3. Defaults Upon Senior Securities

Not Applicable.

Item 4. Mine Safety Disclosures

Not Applicable.

Item 5. Other Information

None.

Item 6. Exhibits

- 3.1 Restated Certificate of Incorporation (filed as Exhibit 3.1 to Quarterly Report on Form 10-Q filed November 14, 2011, incorporated by reference herein); Amendment to Restated Certificate of Incorporation (filed as Exhibit 3.1 to Current Report on Form 8-K filed July 25, 2014, incorporated by reference herein); Certificate of Amendment to Certificate of Incorporation (filed as Exhibit 3.1 to Current Report on Form 8-K filed August 3, 2015, incorporated by reference herein)
- 3.2 Amended and Restated Bylaws (filed as Exhibit 3.2 to Current Report on Form 8-K filed July 11, 2013, incorporated by reference herein)
- 10.1 Amended and Restated Common Stock Purchase Agreement, dated as of April 17, 2015, by and between Bacterin International Holdings, Inc. and Aspire Capital Fund, LLC (filed as Exhibit 10.23 to Registration Statement on Form S-1 filed April 17, 2014, incorporated by reference herein)
- 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
- 101.INS * XBRL INSTANCE DOCUMENT
- 101.SCH * XBRL TAXONOMY EXTENSION SCHEMA
- 101.CAL * XBRL TAXONOMY EXTENSION CALCULATION LINKBASE
- 101.DEF * XBRL TAXONOMY EXTENSION DEFINITION LINKBASE
- 101.LAB * XBRL TAXONOMY EXTENSION LABEL LINKBASE
- 101.PRE * XBRL TAXONOMY EXTENSION PRESENTATION LINKBASE

* Filed herewith

** Furnished herewith

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.

XTANT MEDICAL HOLDINGS, INC.

Date: August 14, 2015

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

Certification of Chief Executive Officer

I, Daniel Goldberger, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Xtant Medical 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 principles;
 - 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: August 14, 2015

/s/ Daniel Goldberger
Daniel Goldberger
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 Xtant Medical 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 principles;
 - 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: August 14, 2015

/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 Xtant Medical Holdings, Inc. (the "Company") for the quarterly period ended June 30, 2015 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Daniel Goldberger, 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/ Daniel Goldberger

Daniel Goldberger
Chief Executive Officer
Date: August 14, 2015

Section 1350 Certification of Chief Financial Officer

In connection with the Quarterly Report on Form 10-Q of Xtant Medical Holdings, Inc. (the "Company") for the quarterly period ended June 30, 2015 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
Date: August 14, 2015
