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 September 30, 2016

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 during the preceding 12 months (or for such shorter period that the registrant w requirements for the past 90 days. Yes \boxtimes No \square | , , , |
|---|--|
| Indicate by check mark whether the registrant has submitted electronically and post be submitted and posted pursuant to Rule 405 of Regulation S-T ($\S 232.405$ of this cregistrant was required to submit and post such files). Yes \boxtimes No \square | |
| Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, "accelerated filer," and "smaller reporting co | 1 9 1 |
| Large accelerated filer □ Non-accelerated filer □ (Do not check if a smaller reporting company) | Accelerated filer □ Smaller reporting company ⊠ |
| | 401 0 fd T 1 . A 0 M T N M |

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes \square No \boxtimes

Number of shares of common stock, \$0.000001 par value, of registrant outstanding at November 8, 2016: 12,193,970.

XTANT MEDICAL HOLDINGS, INC. FORM 10-Q

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PART I - FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

XTANT MEDICAL HOLDINGS, INC. CONDENSED CONSOLIDATED BALANCE SHEETS

| | | As of September 30, 2016 (unaudited) | | As of ecember 31, 2015 |
|---|----|---|----|------------------------------|
| ASSETS | | | | |
| Current assets: | | | | |
| Cash and cash equivalents | \$ | 1,408,608 | \$ | 6,368,016 |
| Trade accounts receivable, net of allowance for doubtful accounts of \$2,997,747 and \$2,579,634, respectively | | 15,826,130 | | 15,385,218 |
| Current inventories, net | | 26,499,085 | | 22,684,716 |
| Prepaid and other current assets | | 2,034,127 | | 601,697 |
| Total current assets | | 45,767,950 | | 45,039,647 |
| Non-current inventories, net | | 1,271,425 | | 1,607,915 |
| Property and equipment, net | | 16,012,138 | | 11,816,629 |
| Goodwill | | 41,534,626 | | 41,534,626 |
| Intangible assets, net | | 37,021,472 | | 40,237,289 |
| Other assets | _ | 841,354 | _ | 791,221 |
| Total assets | \$ | 142,448,965 | \$ | 141,027,327 |
| | ÷ | , -, | ÷ | 7- 7- |
| LIABILITIES & STOCKHOLDERS' EQUITY | | | | |
| Current liabilities: | | | | |
| Accounts payable | \$ | 12,889,056 | \$ | 9,386,531 |
| Accounts payable - related party (Note 15) | 4 | 1,060,200 | Ψ | 1,406,763 |
| Revolving line of credit | | 8,353,117 | | - |
| Accrued liabilities | | 5,623,574 | | 9,595,851 |
| Warrant derivative liability | | 333,613 | | 1,050,351 |
| Current portion of capital lease obligations | | 209,826 | | 35,139 |
| Total current liabilities | _ | 28,469,386 | _ | 21,474,635 |
| Total Culterit Habilities | | 20,405,500 | | 21,474,033 |
| Long-term liabilities: | | | | |
| Capital lease obligation, less current portion | | 720,265 | | 7,800 |
| Long-term convertible debt, less issuance costs | | 68,864,974 | | 66,436,647 |
| Long-term debt, less issuance costs | | 49,493,259 | | 44,231,718 |
| Total liabilities | | 147,547,884 | | 132,150,800 |
| Commitments and Contingencies (Note 12) | | | | |
| 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; shares issued and outstanding as of September | | | | |
| 30, 2016 12,193,970 and shares issued and outstanding as of December 31, 2015 11,897,601 | | 11 | | 11 |
| Additional paid-in capital | | 82,898,754 | | 81,917,488 |
| Accumulated deficit | | (87,997,684) | | (73,040,972) |
| Total stockholders' (deficit) equity | _ | (5,098,919) | | 8,876,527 |
| Italian (across) equity | | (5,050,515) | | 0,070,027 |
| Total liabilities & stockholders' (deficit) equity | \$ | 142,448,965 | \$ | 141,027,327 |
| | | | | |

See notes to unaudited condensed consolidated financial statements.

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

| | Three Months Ended September 30, | | | | Ended 30, | | | |
|---|----------------------------------|-------------|----|-------------|--------------|---------------|----|--------------|
| | | 2016 | | 2015 | | 2016 | | 2015 |
| Revenue | | | | | | _ | | _ |
| Orthopedic product sales | \$ | 22,907,717 | \$ | 17,421,397 | | \$ 65,025,908 | \$ | 36,431,354 |
| Other revenue | | 186,423 | | 271,623 | | 505,971 | | 657,395 |
| Total Revenue | | 23,094,140 | | 17,693,020 | | 65,531,879 | | 37,088,749 |
| | | | | | | | | |
| Cost of sales | | 7,114,041 | | 6,035,673 | | 20,749,381 | | 12,883,439 |
| Gross Profit | | 15 000 000 | | 11 657 247 | | 44 702 400 | | 24 205 210 |
| Gioss Fiolit | | 15,980,099 | | 11,657,347 | _ | 44,782,498 | | 24,205,310 |
| Operating Expenses | | | | | | | | |
| General and administrative | | 3,773,236 | | 3,980,805 | | 11,216,112 | | 8,805,104 |
| Sales and marketing | | 11,242,820 | | 8,430,303 | | 32,115,763 | | 18,179,552 |
| Research and development | | 928,930 | | 794,464 | | 2,612,402 | | 1,519,196 |
| Depreciation and amortization | | 1,265,490 | | 1,541,220 | | 3,690,519 | | 1,765,994 |
| Acquisition and integration related expenses (Note 2) | | 517,083 | | 3,856,519 | | 1,269,613 | | 3,856,519 |
| Extinguishment of debt | | 0 | | (2,345,019) | | 0 | | (2,345,019) |
| Impairment of assets | | 0 | | 233,748 | | 0 | | 233,748 |
| Non-cash consulting expense | | 156,129 | | 50,000 | | 266,721 | | 190,869 |
| Total Operating Expenses | | 17,883,688 | | 16,542,040 | | 51,171,130 | | 32,205,963 |
| | | (4.000.00) | | (4.004.000) | | (5.555.555) | | (2.222.27) |
| Loss from Operations | | (1,903,589) | | (4,884,693) | | (6,388,632) | | (8,000,653) |
| Other Income (Expense) | | | | | | | | |
| Interest expense | | (3,163,534) | | (2,111,721) | | (8,974,895) | | (4,930,941) |
| Change in warrant derivative liability | | 220,409 | | 397,366 | | 716,738 | | (78,923) |
| Non-cash consideration associated with stock purchase agreement | | - | | - | | - | | (558,185) |
| Other income (expense) | | (51,350) | | (89,926) | | (309,924) | | (193,052) |
| | | | | | | | | |
| Total Other Income (Expense) | | (2,994,475) | | (1,804,281) | | (8,568,081) | _ | (5,761,101) |
| Net Loss from Operations | ¢ | (4,898,064) | ¢ | (6,688,974) | ¢ | (14,956,713) | φ | (13,761,754) |
| Net 1033 from Operations | \$ | (4,090,004) | \$ | (0,000,974) | \$ | (14,930,713) | \$ | (13,/01,/34) |
| Net loss per share: | | | | | | | | |
| Basic | \$ | (0.40) | \$ | (0.64) | \$ | (1.24) | \$ | (1.70) |
| Dilutive | \$ | (0.40) | \$ | (0.64) | | (1.24) | \$ | (1.70) |
| Change and in the commutation. | | | | | | | | |
| Shares used in the computation: Basic | | 12,193,970 | | 10,432,622 | | 12,064,782 | | 8,100,226 |
| Dilutive | | 12,193,970 | | 10,432,622 | | 12,064,782 | | |
| Dilutive | | 12,193,970 | | 10,432,022 | | 12,004,702 | | 8,100,226 |

See notes to unaudited condensed consolidated financial statements.

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

(Unaudited)

Nine Months Ended September 30, 2016 2015 Operating activities: Net loss (14,956,713) \$ (13,761,754)Adjustments to reconcile net loss to net cash used in operating activities: Depreciation and amortization 5,551,854 2,403,934 Non-cash interest 4,477,148 1,665,172 Extinguishment of debt (2,345,019)Non-cash consideration associated with stock purchase agreement 558,185 Impairment of assets 233,748 Amortization of debt discount 707,281 (Gain) Loss on sale of fixed assets (14,149)11,377 Non-cash consulting expense/stock option expense 522,987 881,681 Provision for losses on accounts receivable and inventory 898,285 805,684 Change in derivative warrant liability (716,738)78,923 Changes in operating assets and liabilities: Accounts receivable (859,026)(2,801,124)Inventories (3,958,050)477,818 Prepaid and other assets (325,976)(1,482,561)Accounts payable 3,155,962 694,326 Accrued liabilities (3,813,998)1,688,664 Net cash used in operating activities (9,027,080)(11,194,999) Investing activities: Acquisition of X-spine Systems, Inc. (73,033,049)Purchases of property and equipment and intangible assets (5,566,569)(444,312)Proceeds from sale of fixed assets 102,587 16,400 Net cash used in investing activities (5,550,169)(73,374,774)Financing activities: Payments on long-term debt (38,668)Net proceeds from equity private placement 515,395 Payment on royalty obligation (542,905)Proceeds from the issuance of capital leases 70,921 Payments on capital leases (80,071)(78,490)Net proceeds from the issuance of long-term debt 1,000,000 17,479,159 Net proceeds from the issuance of convertible debt 66,322,366 2,212,718 Net proceeds from the revolving line of credit 8,353,113 Net proceeds from issuance of stock 300,000 2.118.483 Net cash provided by financing activities 11,785,760 85,846,261 Net change in cash and cash equivalents (4,959,408)3,444,407 Cash and cash equivalents at beginning of period 6,368,016 4,526,026 Cash and cash equivalents at end of period 1,408,608 7,970,433

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 condensed 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 subsidiaries, Bacterin International, Inc., ("Bacterin") a Nevada corporation, Xtant Medical, Inc. ("Xtant Medical"), a Delaware corporation, and X-spine Systems, Inc. ("X-spine"), an Ohio corporation, (Xtant Medical, Bacterin and X-spine are jointly referred to herein as the "Company"). All intercompany balances and transactions have been eliminated in consolidation. Xtant develops, manufactures and markets orthopedic products for domestic and international markets. Xtant products serve the combined specialized needs of orthopedic and neurological surgeons, including orthobiologics for the promotion of bone healing, implants and instrumentation for the treatment of spinal disease, tissue grafts for the treatment of orthopedic disorders to promote healing following spine, cranial and surgeries and the development, manufacturing and sale of medical devices for use in orthopedic spinal surgeries. The Company also previously developed and licensed coatings for various medical device applications.

On July 31, 2015, Xtant acquired all of the outstanding capital stock of X-spine Systems, Inc. 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 2, "Business Combination" below). Following the closing of the acquisition, on July 31, 2015, Bacterin International Holdings, Inc. changed its name to Xtant Medical Holdings, Inc. On August 6, 2015, Xtant formed a new wholly owned subsidiary, Xtant Medical, to facilitate the integration of Bacterin and X-spine.

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 donors could have an adverse impact on our business.

The accompanying interim condensed consolidated financial statements of Xtant for the three and nine months ended September 30, 2016 and 2015 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, 2016.

These financial statements should be read in conjunction with the financial statements and notes thereto which are included in Xtant's Annual Report on Form 10-K for the year ended December 31, 2015. 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.

Concentrations and Credit Risk

The Company's accounts receivable are due from a variety of health care organizations and distributors throughout the world. Approximately 95% of sales were in the United States for the nine months ended September 30, 2016 and 2015. 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 September 30, 2016.

In the nine months ended September 30, 2016, Xtant purchased from Norwood Medical approximately 12% of its operating products (See Note 15, "Related Party Transactions" below).

Revenue by geographical region is as follows:

| | Nine Mon Septem | - | |
|---------------|------------------------|----|------------|
| | 2016 | | 2015 |
| United States | \$ 62,253,220 | \$ | 35,419,434 |
| Rest of world | 3,278,659 | | 1,669,315 |
| Total revenue | \$ 65,531,879 | \$ | 37,088,749 |

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, goodwill, and intangible assets and liabilities; valuation allowances for trade receivables, inventory, and deferred income tax assets and liabilities; valuation of the warrant derivative liability, inventory 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 assets. 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 5, "Impairment of Assets" below.)

Goodwill

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

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.

Advertising Costs

The Company expenses advertising costs as incurred. The Company had advertising expense of \$140,049 and \$93,854 for the nine months ended September 30, 2016 and 2015, respectively.

Research and Development

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

Other Income (Expense)

Other income (expense) primarily consists of non-recurring items that are outside of the normal Company's operations such as other related legal expenses, gain or loss on the sale of fixed assets and miscellaneous minor adjustments to account balances.

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 nine months ended September 30, 2016 and 2015, 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 1,794,792 and 1,896,253 outstanding stock options and warrants for the three and nine months ended September 30, 2016 and 2015, 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 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 nine months ended September 30, 2016 and 2015, 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 September 30, 2016 and December 31, 2015, that are measured at fair value on a recurring basis:

Warrant derivative liability

| | As of | As of |
|---------|-----------------------|----------------------|
| | September 30, 2016 | December 31, 2015 |
| Level 1 | <u> </u> | _ |
| Level 2 | - | - |
| Level 3 | \$ 333,613 | \$ 1,050,351 |

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 11, "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 nine months ended September 30, 2016:

Warrant derivative liability

| Balance at January 1, 2016 | \$ 1,050,351 |
|---|-----------------|
| Gain recognized in earnings in first six months of 2016 | (496, 329) |
| Balance at June 30, 2016 | 554,022 |
| Gain recognized in earnings in third quarter of 2016 | (220,409) |
| Balance at September 30, 2016 | \$ 333,613 |

During the three and nine months ended September 30, 2016, the Company did not change any of the valuation techniques used to measure its liabilities at fair value.

(2) Business Combination

On July 31, 2015 (the "Acquisition Date"), the Company completed its acquisition of 100% of the outstanding common stock of X-spine. During the nine months ended September 30, 2016, the Company recorded \$1,269,613 of integration related expenses and \$3,325,048 of amortization of the intangible assets associated with the acquisition in the condensed consolidated statements of operations. We anticipate additional integration expenses to occur during the fourth quarter of 2016.

Unaudited Supplemental Pro Forma Financial Information

The unaudited pro forma results presented below for the three and nine months ending September 30, 2016 include the combined results of both entities as if the acquisition had been consummated as of January 1, 2015. Certain pro forma adjustments have been made to reflect the impact of the purchase transaction, primarily consisting of amortization of intangible assets with determinable lives and interest expense on long-term debt. In addition, certain historical expenses, such as warrant expense and interest expense associated with debt that was immediately repaid, were eliminated from these pro-forma results. The pro forma information does not necessarily reflect the actual results of operations had the acquisition been consummated at the beginning of the fiscal reporting period indicated nor is it indicative of future operating results. The pro forma information does not include any adjustment for potential revenue enhancements, cost synergies or other operating efficiencies that could result from the acquisition.

| | Thr | Three Months Ended September 30, | | | Nine Months Ende | | | ed September 30, | |
|----------|-----|----------------------------------|----|-------------|------------------|--------------|----|------------------|--|
| | | 2016 | | 2015 | | 2016 | | 2015 | |
| Revenue | \$ | 23,094,140 | \$ | 20,901,292 | \$ | 65,531,879 | \$ | 64,401,225 | |
| Net loss | \$ | (4,898,064) | \$ | (5,357,091) | \$ | (14,981,713) | \$ | (16,061,103) | |

(3) Equity

We entered into the Purchase Agreement on March 16, 2015, as amended and restated on 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 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 condensed consolidated statements of operations as a commitment fee. In the first nine months of 2016 we issued 150,000 shares of our common stock to Aspire Capital for \$300,000 in aggregate proceeds. For the same period in 2015, we issued 417,000 shares of our common stock to Aspire Capital for \$1,366,941 in aggregate proceeds, which were used for working capital and general corporate purposes. The Company did not issue any shares to Aspire Capital in the last six months of 2015.

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 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.

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 in debt and 4,242,655 shares of our common stock.

Related to the acquisition, on October 8, 2015 the Company granted 78,510 restricted stock units to five X-spine employees at \$3.19 a share, for a total cost of \$250,447, to be expensed ratably over twelve months in Acquisition and integration related expenses from the Acquisition Date.

On September 4, 2015, the Company sold an aggregate of 140,053 shares of our common stock to certain members of our Board of Directors in a private placement transaction for aggregate cash proceeds of \$515,395.

(4) Inventories, Net

Inventories consist of the following:

| | Sep | otember 30, 2016 | De | ecember 31, 2015 |
|------------------------------|-----|---------------------|----|---------------------|
| Current inventories | | | | |
| Raw materials | \$ | 5,508,685 | \$ | 4,860,914 |
| Work in process | | 2,258,138 | | 2,720,707 |
| Finished goods | | 22,399,012 | | 18,289,674 |
| Gross current inventories | | 30,165,835 | | 25,871,295 |
| Reserve for obsolescence | | (3,666,750) | | (3,186,579) |
| Current inventories, net | | 26,499,085 | | 22,684,716 |
| Non-current inventories | | | | |
| Finished goods | | 1,684,588 | | 2,021,077 |
| Reserve for obsolescence | | (413,163) | | (413,162) |
| Non-current inventories, net | | 1,271,425 | | 1,607,915 |
| Total inventories, net | \$ | 27,770,510 | \$ | 24,292,631 |

(5) Impairment of Assets

During the third quarter of 2015, Intangible Assets were reviewed and found to be impaired. The impact, net of amortization, was \$285,224.

(6) Property and Equipment, Net

Property and equipment, net are as follows:

| | Sep | tember 30, 2016 | De | cember 31, 2015 |
|--------------------------------|-----|--------------------|----|--------------------|
| Equipment | \$ | 5,148,782 | \$ | 5,368,567 |
| Computer equipment | | 358,560 | | 348,404 |
| Computer software | | 551,851 | | 503,587 |
| Furniture and fixtures | | 164,216 | | 174,215 |
| Leasehold improvements | | 4,042,311 | | 2,661,802 |
| Vehicles | | 10,000 | | 10,000 |
| Surgical instruments | | 13,196,895 | | 8,175,578 |
| Total cost | | 23,472,615 | | 17,242,153 |
| Less: accumulated depreciation | | (7,460,477) | | (5,425,524) |
| Property and equipment, net | \$ | 16,012,138 | \$ | 11,816,629 |

The Company provides surgical instruments to surgeons to use during surgical procedures. Instruments are classified as non-current assets and are recorded as property, plant and equipment. Instruments are carried at cost and are held at book value (cost less accumulated depreciation). Depreciation is calculated using the straight-line method using a five year useful life.

The Company leases certain equipment under capital leases. For financial reporting purposes, minimum lease payments relating to the assets have been capitalized. As of September 30, 2016, the Company has recorded \$1,316,383 gross capitalized lease assets within Equipment, and \$261,574 of related accumulated depreciation.

Maintenance and repairs expense for the nine months of 2016 and 2015 was \$427,575 and \$272,811, respectively. Depreciation expense related to property and equipment, including property under capital lease for the first nine months of 2016 and 2015 was \$2,181,541, and \$563,790, respectively.

(7) Intangible Assets

Intangible assets consist of various patents with regard to processes for its products and intangible assets associated with the acquisition of X-spine.

The following table sets forth information regarding intangible assets:

| | Sej | ptember 30, 2016 | De | ecember 31, 2015 |
|----------------------------------|-----|---------------------|----|---------------------|
| Patents | \$ | 719,210 | \$ | 564,717 |
| Acquisition related intangibles: | | | | |
| Technology | | 28,698,700 | | 28,698,700 |
| Customer relationships | | 9,911,000 | | 9,911,000 |
| Tradename | | 4,543,300 | | 4,543,300 |
| Non-compete | | 40,500 | | 40,500 |
| Accumulated amortization | | (6,891,238) | | (3,520,928) |
| Intangible assets, net | \$ | 37,021,472 | \$ | 40,237,289 |
| | | _ | | _ |
| Aggregate amortization expense: | \$ | 3,370,309 | \$ | 3,438,596 |

The following is a summary of estimated future amortization expense for intangible assets as of September 30, 2016:

| Remainder of 2016 | \$ 1,119,779 |
|-------------------|------------------|
| 2017 | 4,637,474 |
| 2018 | 4,652,587 |
| 2019 | 4,543,386 |
| 2020 | 4,461,092 |
| Thereafter | 17,607,154 |
| Total | \$ 37,021,472 |

(8) Accrued Liabilities

Accrued liabilities consist of the following:

| | Sep | tember 30, 2016 | De | December 31, 2015 | | |
|-----------------------------|-----|--------------------|----|----------------------|--|--|
| Accrued stock compensation | \$ | 213,758 | \$ | 147,037 | | |
| Wages/commissions payable | | 2,736,925 | | 5,272,241 | | |
| Accrued integration expense | | 358,989 | | 731,645 | | |
| Accrued interest payable | | 889,683 | | 1,716,167 | | |
| Other accrued expenses | | 1,424,219 | | 1,728,761 | | |
| Accrued liabilities | \$ | 5,623,574 | \$ | 9,595,851 | | |

(9) Debt

On July 31, 2015, concurrent with the acquisition of X-spine, we completed an offering of \$65.0 million aggregate principal amount of 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, serves as the investment manager, purchased \$52.0 million aggregate principal amount of the Notes directly from the Company in the offering. On August 10, 2015, the initial purchaser exercised its option with respect to an additional \$3 million aggregate principal amount of Notes.

The Notes bear interest at a rate equal to 6.00% per year. Following the first interest payment date, which occurred 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 thenoutstanding shares of Xtant common stock. The conversion rate will be subject to an adjustment as described in the Indenture for certain events, including, among others:

- the issuance of certain share and cash dividends on our common stock;
- the issuance of certain rights or warrants;
- certain subdivisions and combinations of our capital stock;
- · certain distributions of capital stock, indebtedness or assets; and
 - certain tender or exchange offers.

We will not adjust the conversion rate for other events, such as for an issuance of our common stock for cash or in connection with an acquisition that may dilute our common stock thereby adversely affecting its market price. 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 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, we 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 is July 31, 2020 (the "Maturity Date"). Interest under the New Facility is bifurcated into a "cash pay" portion and a "payment-in-kind" ("PIK") 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 us 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.

We accounted for the Notes and for the New Facility with ROS in accordance with ASC Subtopic 470-50, Debt Modifications and Extinguishments, and ASC Subtopic 470-60, Troubled Debt Restructurings by Debtors. Based on the facts and circumstances surrounding the changes to the loan and applying the calculation methodology per the above mentioned ASC Subtopics, the Company recognized a gain from the extinguishment of debt of \$2,345,019. The gain consists of the write-off of the royalty liability offset by the debt discount and capitalized expenses associated with the original debt agreement, including amendments, with ROS.

In addition, the Company calculated a fair value of the New Facility on a non-recurring basis by taking the five year cash flow and discounting it at a market interest rate. There was no significant difference between the calculated value and the stated value of the New Facility.

Approximately \$4.7 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 was capitalized and amortized over the life of the debt and we expensed approximately \$2.5 million in 2015 related to the acquisition itself.

In April 2015, the FASB issued ASU 2015-3 to simplify the presentation of debt issuance costs. This update required 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. As required, the update was adopted and effective for interim and annual periods beginning after December 15, 2015. ASU 2015-3 did not have a material impact.

Prior to the issuance of the New Facility, the Company was required to pay a royalty of 1.75% on the first \$45,000,000 of net sales, plus 1.0% of net sales in excess of \$45,000,000. The estimate of the royalty component of the facility over the life of the agreement resulted in a debt discount and a royalty liability of approximately \$7.4 million at the time of the issuance of the New Facility. The debt discount was amortized to interest expense over the seven year term of the loan using the effective interest method. The royalty liability was to be accreted to \$12.3 million through interest expense over the ten year term of the royalty agreement using the effective interest method. With the issuance of the New Facility, both the debt discount and royalty liability were extinguished as part of the \$2.3 million gain related to the extinguishment of debt.

On March 31, 2016, we entered into an amendment of the New Facility. The amendment modifies the New Facility by extending the time frame during which the Company may elect to allow interest to accrue on its loan in lieu of making interest payments, from December 31, 2015 to March 31, 2016. The amendment also lowers the minimum liquidity requirements of the Company, by allowing the Company to maintain a liquidity amount of \$500,000 or greater through June 30, 2016. The lower minimum liquidity requirement of \$500,000 or greater was extended through January 1, 2017, pursuant to an amendment on June 30, 2016.

On April 14, 2016, we issued \$2,238,166.45 aggregate principal amount of convertible senior unsecured notes "Additional Notes" in a private placement to the OrbiMed purchasers. The funds proceeds were utilized to pay interest due for both the Notes and New Facility on April 15, 2016.

Both the Additional Notes and the Notes bear interest at a rate equal to 6.00% per year. Following the first interest payment date for the Notes, which will be April 15, 2016 for the Notes, and July 15, 2016 for the Additional Notes, interest on the Notes will be payable semiannually in arrears on January 15 and July 15 of each year. Interest accrues 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 for the Notes, and April 14, 2016 for the Promissory Notes. Unless earlier converted or repurchased, the Notes will mature on July 15, 2021.

The Additional Notes may be converted into shares of our common stock (together with cash in lieu of fractional shares) at an initial conversion rate of 344.8276 shares per \$1,000 principal amount of Notes (which represents an initial conversion price of approximately \$2.90 per share). The Additional Notes also enjoys all other terms under the convertible credit agreement which is described above.

On July 29, 2016 we entered into the fourth amendment to the New Facility. The amendment modified the New Facility by including an additional "Tranche A Commitment" in an amount up to \$1,000,000 from ROS and OrbiMed, which was made available to us on July 29, 2016.

On August 12, 2016, we entered into the fifth amendment to the New Facility, which amended one of the negative covenants under the New Facility to take into account the Modification Agreement.

On September 27, 2016, we entered into the sixth amendment to the New Facility. The sixth amendment modifies the New Facility by increasing this fee on any amounts paid under the New Facility from 7.5% to 9.0%. Under the sixth amendment, regular interest will not accrue during the period from July 1, 2016 to September 30, 2016; however, during such period, PIK Interest will accrue at a rate per annum equal to 9.00%, and such PIK Interest will be added to the outstanding principal amount of the loans at September 30, 2016. The sixth amendment also modifies the negative covenants of the New Facility by increasing the amount of purchase money indebtedness and capitalized lease liabilities allowed to be incurred by us and lowering the minimum revenue base for the quarters ending September 30, 2016 and December 31, 2016.

Loan and Security Agreement

On May 25, 2016, we entered into a Loan and Security Agreement (the "LSA") with Silicon Valley Bank, a California corporation (the "Bank"), pursuant to which the Bank agreed to provide us with a revolving line of credit in the aggregate principal amount of \$6,000,000, bearing interest at a floating per annum rate equal to one percentage point (1.00%) above the Prime Rate (as that term is defined in the LSA). The line of credit is secured by a first priority perfected security interest in certain of our assets in favor of the Bank. The maturity date of the revolving line of credit is May 25, 2019.

As a condition to the extension of credit under the LSA, we agreed to enter into an Intellectual Property Security Agreement with the Bank, dated May 25, 2016, and to take such other actions as the Bank may request in its good faith business judgment to perfect and maintain a perfected security interest in favor of the Bank in our intellectual property.

On August 12, 2016, we entered into a First Loan Modification Agreement (the "Modification Agreement") with the Bank, which amended certain provisions of the LSA. Pursuant to the terms of the Modification Agreement, the Bank increased the aggregate principal amount of the revolving line of credit to \$11,000,000. Any principal amounts outstanding now bears interest at a floating per annum rate equal to four percentage points (4.00%) above the Prime Rate (as that term is defined in the Modification Agreement).

Long-term debt consists of the following:

| | S | eptember 30, 2016 | December 31, 2015 | | |
|--|----|----------------------|----------------------|-------------|--|
| Loan payable to ROS Acquisition Offshore (See details above) | \$ | 43,000,000 | ¢ | 42,000,000 | |
| | Ф | , , | Ф | , , | |
| PIK Interest payable to ROS | | 6,883,890 | | 2,700,476 | |
| 6% convertible senior unsecured notes due 2021 (See details above) | | 70,238,167 | | 68,000,000 | |
| Gross long-term debt | | 120,122,057 | | 112,700,476 | |
| Less: capitalized debt issuance costs | | (1,763,824) | \$ | (1,563,353) | |
| Long-term debt, less issuance costs | \$ | 118,358,233 | \$ | 111,137,123 | |

The following is a summary of maturities due on the debt as of September 30, 2016:

| Remainder of 2016 | \$ - |
|----------------------------|-------------------|
| 2017 | - |
| 2018 | - |
| 2019 | - |
| 2020 | 49,883,889 |
| Thereafter | 70,238,168 |
| Total gross long-term debt | \$ 120,122,057 |

(10) Stock-Based Compensation

The Amended and Restated Xtant Medical Equity Incentive Plan (the "Plan") provides for stock awards, including options and performance stock awards, to be granted to employees, consultants, independent contractors, officers and directors. The purpose of the 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. 1,900,000 shares are currently authorized under the Plan and at September 30, 2016, we had approximately 530,000 million shares available for issuance which are authorized, but unissued or reacquired shares.

Stock compensation expense recognized in the condensed consolidated statements of operations for the nine months ended September 30, 2016 and 2015 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-Scholes-Merton method applied to individual grants. Key assumptions used to estimate the fair value of stock awards are as follows:

| | Nine Months Ended September 30, 2016 | Nine Months Ended September 30, |
|--------------------------|---|---------------------------------------|
| Risk-free interest rate | 2.21% | 2015 1.30% |
| Expected volatility | 79% | 75% |
| Expected term (Years) | 6.0 | 6.0 |
| Expected forfeiture rate | 20% | 20% |
| Dividend yield | 0% | 0% |

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

| | | 2016 | | | 2015 | |
|-----------------------------|-----------|-------------|------------|----------|-------------|------------|
| | | | Weighted | | | Weighted |
| | | | Average | | | Average |
| | | Weighted | Fair | | Weighted | Fair |
| | | Average | Value at | | Average | Value at |
| | | Exercise | Grant | | Exercise | Grant |
| | Shares | Price | Date | Shares | Price | Date |
| Outstanding at January 1 | 664,081 | \$ 10.64 | \$ 5.32 | 695,336 | \$ 11.09 | \$ 5.35 |
| Granted | - | - | - | 45,000 | 4.00 | 2.81 |
| Exercised | - | - | - | - | - | - |
| Cancelled or expired | (105,275) | 9.48 | 4.50 | (31,604) | 12.71 | 6.02 |
| Outstanding at September 30 | 558,806 | \$ 10.85 | \$ 5.42 | 708,732 | \$ 10.54 | \$ 5.29 |
| Exercisable at September 30 | 409,179 | \$ 12.67 | \$ 6.15 | 388,498 | \$ 13.53 | \$ 6.43 |

The aggregate intrinsic value of options outstanding as of September 30, 2016 was zero because the closing price of the stock at September 30, 2016 was less than the strike price of all options outstanding. As of September 30, 2016, there were 409,179 unvested options with a weighted average fair value at the grant date of \$12.67 per option. As of September 30, 2016, we had approximately \$700,000 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 expenses for the nine months ended September 30, 2016 and 2015 of zero and \$140,869, respectively, as Non-cash consulting expense.

Total share based compensation recognized for employees, directors and consultants was \$479,289 and \$444,352 for the quarters ended September 30, 2016 and 2015, respectively.

On July 1, 2015, the 39,312 shares of restricted stock units granted by the Company on November 10, 2014 to the independent Directors of the Company vested. These restricted shares were issued when the stock price was \$4.07 per share. The total expense of \$160,000 was recognized ratably over the vesting period as Non-cash consulting expense.

On July 1, 2015, the Company granted 58,820 restricted stock units to the independent Directors of the Company. These restricted shares vested on July 1, 2016 and were granted when the stock price was \$3.40 per share. The total expense of \$200,000 was recognized ratably over the period as Non-cash consulting expense. In the nine months ended September 30, 2016, \$100,000 was expensed.

On October 8, 2015 the Company granted 78,510 restricted stock units to five X-spine employees at \$3.19 a share for a total cost of \$250,447 to be expensed ratably from the Acquisition Date over the vesting period as Acquisition and integration related expense. In the nine months ended September 30, 2016, \$55,995 was expensed.

Also, on October 8, 2015, the Company granted 20,000 restricted stock units to four Xtant area sales vice presidents at \$3.19 a share for a total cost of \$65,550 to be expensed ratably over the vesting period as General and administrative expense. In the nine months ended September 30, 2016, \$15,888 was expensed.

On , July 20 2016, the Company granted 300,000 incentive stock options to three Xtant area sales vice presidents at \$1.77 a share for a total cost of \$531,000 to be expensed ratably over the vesting period as General and administrative expense. In the nine months ended September 30, 2016, \$83,833 was expensed.

On July 5, 2016, the Company granted 80,404 restricted stock units to four of the independent Directors of the Company (Messrs. Lopach, Swanson, Deedrick and Buckman). These restricted shares vest on July 5, 2017 and were granted when the stock price was \$1.99 per share. The total expense of \$160,004 is being recognized ratably over the period as Non-cash consulting expense. In the nine months ended September 30, 2016, \$42,000 was expensed.

On July 5, 2016, the Company granted 59,400 stock options to two of the independent Directors of the Company (Messrs. Mazzocchi and Timko). These stock options vest on July 5, 2017 and were granted when the stock price was \$1.99 per share. The total expense of \$118,206 is being recognized ratably over the period as Non-cash consulting expense. In the nine months ended September 30, 2016, \$10,000 was expensed.

On October 6, 2016, we issued an option to purchase 300,000 shares of our common stock at \$1.11 per share to our President, Carl O'Connell, outside of our Amended and Restated Equity Incentive Plan.

(11) Warrants

The following table summarizes our warrant activities for the quarter ended September 30, 2016:

| | Common Stock Warrants | Weighted Average Exercise Price |
|-----------------------------------|-----------------------------|--|
| Outstanding as of January 1, 2015 | 1,655,320 | \$ 13.06 |
| Issued | - | - |
| Expired | (376,754) | 22.87 |
| Outstanding at January 1, 2016 | 1,278,566 | \$ 8.45 |
| Issued | - | - |
| Expired | (42,580) | 31.73 |
| Outstanding at September 30, 2016 | 1,235,986 | \$ 7.65 |

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 gain of \$716,738 resulting from the change in the fair value of the warrant derivative liability for the first nine months of 2016. 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 a valuation model with the following weighted-average assumptions:

| | 1 | Nine Months Ended September 30, | | |
|--|----|------------------------------------|-------|--|
| | 20 | 16 | 2015 | |
| Value of underlying common stock (per share) | \$ | 1.13 \$ | 3.26 | |
| Risk free interest rate | | 2.21% | 1.37% | |
| Expected term (years) | | 3.25 | 4.25 | |
| Volatility | | 79% | 75% | |
| Dividend vield | | 0% | 0% | |

The following table summarizes our activities related to warrants accounted for as a derivative liability for the nine months ended September 30, 2016 and 2015:

| | 2016 | 2015 |
|-------------------------------|-----------|-----------|
| Balance at January 1, | 1,125,119 | 1,171,692 |
| Derivative warrants issued | - | - |
| Derivative warrants exercised | - | - |
| Expired | - | - |
| Balance at September 30, | 1,125,119 | 1,171,692 |

(12) Commitments and Contingencies

Operating Leases

We lease four office facilities under non-cancelable operating lease agreements with expiration dates in 2016, 2019, 2023 and 2025. We have the option to extend the four leases for up to 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.

On October 23, 2015, the Company entered into a sale-leaseback transaction for the property located at 664 Cruiser Lane, Belgrade, Montana, 59714 which formerly secured the 6% loan payable to Valley Bank of Belgrade. Our new lease agreement has a ten year term with an option to extend for two additional five year terms for a total of ten years.

Future minimum payments for the next five years and thereafter as of September 30, 2016, under these leases, are as follows:

| Remainder of 2016 | \$ 195,218 |
|-------------------|-----------------|
| 2017 | 794,437 |
| 2018 | 806,747 |
| 2019 | 668,807 |
| 2020 | 396,263 |
| 2021 | 375,289 |
| Thereafter | 1,038,416 |
| Total | \$ 4,275,177 |

Rent expense was \$661,219 and \$458,814 for the nine months ended September 30, 2016 and 2015, 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.

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 and was settled in the quarter ending March 31, 2016.

We are also engaged in ordinary routine litigation incidental to our business, including product liability disputes.

(13) 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 Company did not recognize any interest or penalties related to income taxes for the nine months ended September 30, 2016 and 2015.

(14) Supplemental Disclosure of Cash Flow Information

Supplemental cash flow information is as follows:

| | Nine Months Ended September 30, | | |
|---|--|----|------------|
| | 2016 2015 | | |
| Supplemental disclosure of cash flow information | | | |
| Cash paid during the period for: | | | |
| Interest | \$ 4,530,170 | \$ | 2,372,453 |
| Non-cash activities: | | | |
| Issuance of capital leases | \$ 967,221 | \$ | 70,020 |
| Issuance of shares associated with legal settlement | \$ 225,000 | \$ | - |
| Issuance of share for non-cash consulting expense | \$ - | \$ | 190,869 |
| Issuance of restricted stock to employees | \$ - | \$ | 41,741 |
| Issuance of shares in conjunction with the acquisition of X-spine | \$ - | \$ | 14,934,146 |

(15) Related Party Transactions

Darrel Holmes, our former Chief Operating Officer of our Bacterin subsidiary, serves on the board of American Donor Services Inc. ("ADS"). Mr. Holmes receives \$5,000 per year for his 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 nine months ended September 30, 2016 and 2015 was \$844,643 and \$1,367,487, 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.

Certain of X-spine's former shareholders now own over 10% of our common stock as of the Acquisition Date, and have owned a controlling interest of X-spine's largest supplier, Norwood Tool Company d/b/a Norwood Medical. In the first nine months of 2016, Xtant purchased from Norwood Medical approximately 12% of its operating products.

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.

(16) Segment and Geographic Information

The Company's management reviews financial results and manages the business on an aggregate basis. Therefore, financial results are reported in a single operating segment: the development, manufacture and marketing of orthopedic medical products and devices.

The Company attributes revenues to geographic areas based on the location of the customer. Total revenue by major geographic area is reported in Note 1, "Business Description and Summary of Significant Accounting Policies" above.

(17) Subsequent Events

On October 6, 2016, our board of directors appointed Carl D. O'Connell to serve as the President of the Company. His appointment became effective October 6, 2016. In connection with the hiring of Mr. O'Connell, we issued him an option to purchase 300,000 shares of our common stock at \$1.11 per share which start vesting 60,000 shares on October 6, 2017 and then vest 15,000 shares per quarter on January 6, 2018 until October 6, 2021.

On October 31, 2016, the Company distributed to holders of its Common Stock and to holders of its convertible notes, at no charge, non-transferable subscription rights to purchase units. Each unit consisted of one share of Common Stock and one tradable warrant representing the right to purchase one share of Common Stock ("Tradeable Warrants"). The offering of units pursuant to the subscription rights is referred to as the "Rights Offering." On October 31, 2016, the Company entered into a dealer-manager agreement (the "Dealer-Manager Agreement") with Maxim Group LLC ("Maxim"), to engage Maxim as dealer-manager for the Rights Offering.

In the Rights Offering, holders received two subscription rights for each share of Common Stock, or each share of Common Stock underlying our convertible notes owned on the record date, October 21, 2016. Subscribers whose subscriptions otherwise would have resulted in their beneficial ownership of more than 4.99% of the Company's Common Stock could elect to receive, in lieu of shares of Common Stock in excess of that threshold, pre-funded warrants to purchase the same number of shares of Common Stock for \$0.01 ("Pre-Funded Warrants"), and the subscription price per unit consisting of a Pre-Funded Warrant in lieu of a share of Common Stock was reduced by the \$0.01 exercise price.

The Rights Offering commenced on October 31, 2016 and the subscription rights are expected to expire on November 14, 2016, unless extended. The units were initially priced at \$0.90 per unit. On November 9, 2016, the Company reduced the subscription price to \$0.75 per unit. Assuming that all units are sold in the Rights Offering and no elections to receive Pre-Funded Warrants are made, we estimate that the gross proceeds from the Rights Offering will be approximately \$11.3 million and the net proceeds from the Rights Offering will be approximately \$10.2 million, based on a subscription price of \$0.75 per unit, after deducting fees and expenses payable to Maxim, and after deducting other expenses payable by us and excluding any proceeds received upon exercise of any Tradeable Warrants issued in the offering. The Tradeable Warrants are exercisable for a period of five years for one share of Common Stock at an exercise price of \$0.90 per share. After the one-year anniversary of issuance, we may redeem the Tradable Warrants for \$0.01 per Tradable Warrant if the volume weighted average price of our Common Stock is above \$2.25 for each of 10 consecutive trading days.

In connection with the Rights Offering, the Company will pay to Maxim a cash fee equal to 7% of the gross proceeds received by us directly from exercises of Subscription Rights. We will also reimburse Maxim up to \$75,000 for expenses incurred in connection with the Rights Offering.

Under the terms and subject to the conditions contained in the Dealer-Manager Agreement, the Company has agreed not to issue, agree to issue or announce the issuance of any shares of Common Stock or Common Stock equivalents until 90 days after the closing date of the Rights Offering, without the consent of Maxim, subject to certain exceptions including a pre-existing agreement, equity awards, conversion of derivative securities and in connection with any acquisitions, partnerships or strategic transactions.

A registration statement on Form S-1, as amended (File No. 333-213350), relating to the securities being offered and sold in connection with the Rights Offering was declared effective by the U.S. Securities and Exchange Commission ("SEC") on October 31, 2016. A prospectus and prospectus supplement relating to and describing the terms of the Rights Offering has been filed with the SEC as a part of the registration statement and is available on the SEC's web site at http://www.sec.gov.

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

Safe Harbor Declaration

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," 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 the acquisition of X-spine Systems, Inc. and any other business combinations or acquisitions successfully;
- · our ability to remain listed on the NYSE MKT;
- our ability to obtain financing on reasonable terms;
- our ability to increase revenue;
- our ability to comply with the covenants in our credit facility;
- our ability to maintain sufficient liquidity to fund our operations;
- the ability of our sales force to achieve expected results;
- our ability to remain competitive;
- government regulations;
- 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;
- the availability of our facilities;
- · government and third-party coverage and reimbursement for our products;
- our ability to obtain regulatory approvals;
- our ability to successfully integrate recent and future business combinations or acquisitions;
- · our ability to use our net operating loss carry-forwards to offset future taxable income;
- · our ability to deduct all or a portion of the interest payments on the Notes for U.S. federal income tax purposes;
- · our ability to service our debt;
- · product liability claims and other litigation to which we may be subjected;
- product recalls and defects;

- timing and results of clinical studies;
- our ability to obtain and protect our intellectual property and proprietary rights;
- infringement and ownership of intellectual property;
- · our ability to remain accredited with the American Association of Tissue Banks;
- influence by our management;
- · our ability to pay dividends; and
- · our ability to issue preferred stock.

The forward-looking statements contained in this Form 10-Q are based on our current expectations and beliefs concerning future developments and their potential effects on us. There can be no assurance that future developments affecting us will be those that we have anticipated. These forward-looking statements involve a number of risks, uncertainties, or assumptions, many of which are beyond our control, which may cause actual results or performance to be materially different from those expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, those factors described in the "Risk Factors" sections of our Annual Report on Form 10-K for the year ended December 31, 2015. 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.

Results of Operation

Comparison of Quarters Ended September 30, 2016 and September 30, 2015

As with all line items stated in this comparison, the results for the prior year only include X-spine results as of the Acquisition Date (See Note 2, "Business Combination" above).

Revenue

Total revenue for the quarter ended September 30, 2016 increased approximately 30.5% to \$23,094,140 compared to \$17,693,020 in the prior year. The increase of \$5,401,119 is mostly due to the X-spine acquisition.

Cost of sales

Costs of sales consist primarily of manufacturing costs and depreciation of surgical trays. Costs of sales increased by 17.9% or \$1,078,368 to \$7,114,041 for the quarter ended September 30, 2016 from \$6,035,673 for the quarter ended September 30, 2015. Cost of sales as a percent of total sales was 30.8% of revenues for the quarter ended September 30, 2016, compared to 34.1% in the third quarter ended 2015. The decrease is primarily the result of economies of scale and customer mix related to the X-Spine acquisition.

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 8.1%, or \$1,341,648 for the quarter ended September 30, 2016, compared to the quarter ended September 30, 2015, primarily due to the reasons set forth below and the expenses due to the X-spine acquisition which includes "Acquisition and integration related expenses".

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 decreased 5.2%, or \$207,568, to \$3,773,236 for the quarter ended September 30, 2016, compared to the same period of 2015. The decrease is mostly due to cost containment efforts.

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 33.4%, or \$2,812,517, to \$11,242,820 for the quarter ended September 30, 2016, compared to \$8,430,303 for the same period of 2015. The increase is almost all due to the acquisition of X-spine. As a percentage of revenue, sales and marketing expenses remained flat of 48.7% in the quarter ended September 30, 2016 compared to 47.6% for the same period of 2015.

Research and Development

Research and development expenses consist primarily of internal costs for the development of new technologies and processes for our orthopedic product lines. Research and development expenses increased \$134,466 or 16.9% from \$794,464 for the quarter ended September 30, 2015 to \$928,930 for the same period of 2016. All of the increase is due to the acquisition of X-spine.

Depreciation and Amortization

Depreciation and amortization expense consists of depreciation of long-lived property and equipment, patents and intangible assets that resulted from the acquisition of X-spine. Depreciation and amortization expense decreased \$275,730 to \$1,265,490 for the quarter ended September 30, 2016, from \$1,541,220 in the same period in 2015. Almost all of the decrease is due to a lower amortization of the intangible assets that resulted from the acquisition of X-spine.

Acquisition and Integration Related Expenses

Acquisition and Integration related expenses are \$517,083 for the quarter ended September 30, 2016. Acquisition related expenses consisted of investment banking, accounting, consulting, legal fees and miscellaneous expenses associated with the due diligence and execution of the acquisition. Integration related expenses, which accounted for all of the expenses this quarter, consist of samples, travel and meeting, severance due to reduction in force, retention bonuses and software. We anticipate relatively few additional expenses to occur during the fourth quarter of 2016.

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 \$106,129 to \$156,129 for the quarter ended September 30, 2016, from \$50,000 in the same period in the prior year due to an increase in the number of restricted shares issued.

Interest Expense

Interest expense is from our debt instruments. Interest expense for the quarter ended September 30, 2016 increased \$1,051,813 to \$3,163,534, as compared to \$2,111,721 in the same period ended 2015. The increase in interest expense is due to a full quarter's expense long-term and convertible debt issued in part to finance the acquisition of X-spine as opposed to two months in the prior year.

Change in Warrant Derivative Liability

For the quarter ended September 30, 2016, the Company recorded a gain in its non-cash warrant derivative liability of \$220,409 which was primarily driven by a decrease in the closing price of the Company's common stock at September 30, 2016, compared to June 30, 2016. 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 contains certain provisions requiring the Company to record a change in the fair value of the warrant derivative liability from period to period.

Other Income (Expense)

Other expense for the quarter ended September 30, 2016 was (\$51,350) as compared to an expense of (\$89,926) in the same period in 2015. Other income (expense) includes other related legal settlement income or expense, gain or loss on the sale of fixed assets and miscellaneous minor adjustments to account balances.

Comparison of Nine Months Ended September 30, 2016 and September 30, 2015

As with all line items stated in this comparison, the results only include X-spine results as of the Acquisition Date (See Note 2, "Business Combination" above).

Revenue

Total revenue for the nine months ended September 30, 2016 increased approximately 76.7% to \$65,531,879 compared to \$37,088,749 in the prior year. The increase of \$28,443,130 is mostly due to the X-spine acquisition.

Cost of sales

Costs of sales consist primarily of manufacturing costs and depreciation of surgical trays. Costs of sales increased by 61.1% or \$7,865,942 to \$20,749,381 for the nine months ended September 30, 2016 from \$12,883,439 for the nine months ended September 30, 2015. Cost of sales as a percent of total sales was 31.7% of revenues for the nine months ended September 30, 2016, compared to 34.7% in the first nine months of 2015. The decrease is primarily the result of changes in product and customer mix related to the X-Spine acquisition and increased economies of scale.

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 58.9%, or \$18,965,167 for the nine months ended September 30, 2016, compared to the nine months ended September 30, 2015, primarily due to the reasons set forth below and the expenses due to the X-spine acquisition which includes "Acquisition and integration related expenses".

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 27.4%, or \$2,411,008, to \$11,216,112 for the nine months ended September 30, 2016, compared to the same period of 2015. Almost all of the increase is due to the acquisition of X-spine.

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 76.7%, or \$13,936,211, to \$32,115,763 for the nine months ended September 30, 2016, compared to \$18,179,552 for the same period of 2015. As a percentage of revenue, sales and marketing expenses remained flat at 49% in the first nine months of 2016 and in the prior year first nine months.

Research and Development

Research and development expenses consist primarily of internal costs for the development of new technologies and processes for our orthopedic product lines. Research and development expenses increased \$1,093,206 or 72.0% from \$1,519,196 for the nine months ended September 30, 2015 to \$2,612,402 for the same period of 2016. All of the increase is due to the acquisition of X-spine.

Depreciation and Amortization

Depreciation and amortization expense consists of depreciation of long-lived property and equipment, patents and intangible assets that resulted from the acquisition of X-spine. Depreciation and amortization expense increased \$1,924,525 to \$3,690,519 for the nine months ended September 30, 2016, from \$1,765,994 in the same period in 2015. Almost all of the increase is due to the amortization of the intangible assets that resulted from the acquisition of X-spine.

Acquisition and Integration Related Expenses

Acquisition and Integration related expenses are \$1,269,613 for the nine months ended September 30, 2016. Acquisition related expenses consisted of investment banking, accounting, consulting, legal fees and miscellaneous expenses associated with the due diligence and execution of the acquisition. Integration related expenses, which accounted for all of the expenses this nine month period, consist of samples, travel and meeting, severance due to reduction in force, retention bonuses and software. We anticipate relatively few additional expenses to occur during the fourth quarter of 2016.

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 \$75,852 to \$266,721 for the nine months ended September 30, 2016, from \$190,869 in the same period in the prior year.

Interest Expense

Interest expense is from our debt instruments. Interest expense for the nine months ended September 30, 2016 increased \$4,043,954 to \$8,974,895 as compared to \$4,930,941 in the same period ended 2015. The increase in interest expense is due to increased long-term and convertible debt issued in part to finance the acquisition of X-spine.

Change in Warrant Derivative Liability

For the nine months ended September 30, 2016, the Company recorded a gain in its non-cash warrant derivative liability of \$716,738 which was primarily driven by a decrease in the closing price of the Company's common stock at September 30, 2016, compared to December 31, 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 contains certain provisions requiring the Company to record a change in the fair value of the warrant derivative liability from period to period.

Non-Cash Consideration Associated with Stock Agreement

In the first nine months of 2015 154,189 shares of our common valued at \$3.62 per share or \$558,185 issued to Aspire Capital as a commitment fee.

Other Income (Expense)

Other expense for the nine months ended September 30, 2016 was (\$309,924) as compared to an expense of (\$193,052) in the same period in 2015. Other income (expense) includes other related legal settlement income or expense, gain or loss on the sale of fixed assets and miscellaneous minor adjustments to account balances.

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 nine months ended September 30, 2016 we received \$300,000 and \$2,118,483 in the same period last year from the sale of our common stock to Aspire Capital pursuant to a Purchase Agreement. See Note 3, "Equity", describing the Purchase Agreement with Aspire Capital. At September 30, 2016, we had \$17,234,738 of cash and cash equivalents and accounts receivable.

Net cash used from operating activities for the nine months ended September 30, 2016 was \$11,194,999 from various operating activities. For the comparable period of 2015, net cash used in operating activities was \$9,027,080.

October 31, 2016, the Company commenced the Rights Offering. In the Rights Offering, holders received two subscription rights for each share of Common Stock, or each share of Common Stock underlying our convertible notes owned on the record date, October 21, 2016. Subscribers whose subscriptions otherwise would have resulted in their beneficial ownership of more than 4.99% of the Company's Common Stock could elect to receive, in lieu of shares of Common Stock in excess of that threshold, Pre-Funded Warrants. See Note 17, "Subsequent Events" above, describing the Rights Offering.

The subscription rights are expected to expire on November 14, 2016, unless extended. The units were initially priced at \$0.90 per unit. On November 9, 2016, the Company reduced the subscription price to \$0.75 per unit. Assuming that all units are sold in the Rights Offering and no elections to receive Pre-Funded Warrants are made, we estimate that the gross proceeds from the Rights Offering will be approximately \$11.3 million and the net proceeds from the Rights Offering will be approximately \$10.2 million, based on a subscription price of \$0.75 per unit, after deducting fees and expenses payable to Maxim, and after deducting other expenses payable by us and excluding any proceeds received upon exercise of any Tradeable Warrants issued in the offering.

Net cash used in investment activities for the nine months ended September 30, 2016 was \$5,550,169 due mostly to purchase of property and equipment which includes additional trays for future sales and additions to our clean room facilities in Montana.

Net cash generated for financing activities was \$11,785,760 for the first nine months of 2016, primarily from issuance of capital leases, convertible debt and the revolving line of credit.

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 September 30, 2016 cash on hand and accounts receivable balance of \$17,234,738 along with anticipated cash receipts from sales expected from operations and proceeds from the Aspire Capital facility and our revolving credit line will be sufficient to meet our anticipated cash requirements through September 30, 2017. If we do not meet our revenue objectives, 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.

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 September 30, 2016. Based upon that evaluation, our chief executive officer and chief financial officer concluded that as of September 30, 2016, 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 September 30, 2016.

Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting during the quarter ended September 30, 2016 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., 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 and was settled in the quarter ending March 31, 2016.

We are also engaged in ordinary routine litigation incidental to our business from time to time, including product liability disputes.

Item 1A. Risk Factors

In addition to the other information set forth in this Report, you should carefully consider the factors discussed in Part I, Item 1A, Risk Factors, in our Form 10-K, which could materially affect our business, financial condition or future results. The risks described in this Report and in our Form 10-K are not the only risks facing our Company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

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

None.

Item 3. Defaults Upon Senior Securities

Not Applicable.

Item 4. Mine Safety Disclosures

Not Applicable.

Item 5. Other Information

None.

Item 6. Exhibits

- * Form of Warrant Certificate for Warrants underlying Units
- 4.2 * Form of Common Stock Certificate
- 4.3 * Form of Pre-Funded Warrant
- Fourth Amendment to Amended and Restated Credit Agreement, dated as of July 29, 2016, by and among Bacterin International, Inc., ROS Acquisition Offshore LP and OrbiMed Royalty Opportunities II, LP. (filed as Exhibit 10.1 to Form 8-K filed August 2, 2016 and incorporated by reference herein).
- First Loan Modification Agreement, dated August 12, 2016, among Xtant Medical Holdings, Inc., Bacterin International, Inc., X-spine Systems, Inc., Xtant Medical, Inc. and Silicon Valley Bank (filed as Exhibit 10.1 to Form 8-K filed August 16, 2016 and incorporated by reference herein).
- Sixth Amendment to Amended and Restated Credit Agreement, dated as of September 27, 2016, by and among Bacterin International, Inc., ROS Acquisition Offshore LP and OrbiMed Royalty Opportunities II, LP. (filed as Exhibit 10.1 to Form 8-K filed September 28, 2016 and incorporated by reference herein).
- * 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: November 10, 2016 By: /s/ John P. Gandolfo

Name: John P. Gandolfo Title: Chief Financial Officer

FORM OF WARRANT CERTIFICATE

Warrants

THE WARRANTS SHALL BE VOID IF NOT EXERCISED PRIOR TO

THE EXPIRATION OF THE EXERCISE PERIOD PROVIDED FOR

IN THE WARRANT AGREEMENT DESCRIBED BELOW

XTANT MEDICAL HOLDINGS, INC.

Incorporated Under the Laws of the State of Delaware

| CUSIP: [] |
|--|
| s) (the "Warrants" and each, a s, Inc., a Delaware corporation to below, to receive from the xercise Price"), as determined as provided for in the Warrant tificate but not defined herein |

Warrant Certificate

This Warrant Certificate certifies that _ , or its registered assigns, is the registered holder of warrant(s "Warrant") to purchase shares of Common Stock, \$0.000001 par value per share ("Common Stock"), of Xtant Medical Holdings (the "Company"). Each Warrant entitles the holder, upon exercise during the period set forth in the Warrant Agreement referred Company that number of fully paid and nonassessable shares of Common Stock as set forth below, at the exercise price (the "Ez pursuant to the Warrant Agreement, payable in lawful money of the United States of America (or through "cashless exercise" a Agreement), subject to the conditions set forth herein and in the Warrant Agreement. Defined terms used in this Warrant Cert shall have the meanings given to them in the Warrant Agreement (as defined on the reverse hereof).

Each Warrant is initially exercisable for one fully paid and non-assessable share of Common Stock. The number of shares of Common Stock issuable upon exercise of the Warrants is subject to adjustment upon the occurrence of certain events set forth in the Warrant Agreement.

The initial Exercise Price per share of Common Stock for any Warrant is equal to \$0.90 per share. The Exercise Price is subject to adjustment upon the occurrence of certain events set forth in the Warrant Agreement.

Subject to the conditions set forth in the Warrant Agreement, the Warrants may be exercised only during the Exercise Period and to the extent not exercised by the end of such Exercise Period, such Warrants shall become void.

Reference is hereby made to the further provisions of this Warrant Certificate set forth on the reverse hereof and such further provisions shall for all purposes have the same effect as though fully set forth at this place.

This Warrant Certificate shall not be valid unless countersigned by the Warrant Agent, as such term is used in the Warrant Agreement.

This Warrant Certificate shall be governed by and construed in accordance with the internal laws of the State of Delaware, without regard to conflicts of laws principles thereof.

[Signature Page Follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Warrant Certificate to be duly executed as of the date first above written.

XTANT MEDICAL HOLDINGS, INC.

By:
Name:
Title:

CORPORATE STOCK TRANSFER, INC.,
as Warrant Agent

By:
Name:
Title:

Title:

[Signature Page to Warrant Certificate]

[Form of Warrant Certificate]

[Reverse]

Warrants may be exercised at any time during the Exercise Period set forth in Section 3.2 of the Warrant Agreement.

The Warrant Agreement provides that upon the occurrence of certain events the number of shares of Common Stock issuable upon exercise of the Warrants set forth on the face hereof may, subject to certain conditions, be adjusted. If, upon exercise of a Warrant, the holder thereof would be entitled to receive a fractional interest in a share of Common Stock, the Company shall, upon exercise, round down to the nearest whole number of shares of Common Stock to be issued to the holder of the Warrant.

Warrant Certificates, when surrendered at the principal corporate trust office of the Warrant Agent by the Registered Holder thereof in person or by legal representative or attorney duly authorized in writing, may be exchanged, in the manner and subject to the limitations provided in the Warrant Agreement, but without payment of any service charge, for another Warrant Certificate or Warrant Certificates of like tenor evidencing in the aggregate a like number of Warrants.

Upon due presentation for registration of transfer of this Warrant Certificate at the office of the Warrant Agent, a new Warrant Certificate or Warrant Certificates of like tenor and evidencing in the aggregate a like number of Warrants shall be issued to the transferee(s) in exchange for this Warrant Certificate, subject to the limitations provided in the Warrant Agreement, without charge except for any tax or other governmental charge imposed in connection therewith.

The Company and the Warrant Agent may deem and treat the Registered Holder(s) hereof as the absolute owner(s) of this Warrant Certificate (notwithstanding any notation of ownership or other writing hereon made by anyone), for the purpose of any exercise hereof, of any distribution to the holder(s) hereof, and for all other purposes, and neither the Company nor the Warrant Agent shall be affected by any notice to the contrary. Neither the Warrants nor this Warrant Certificate entitles any holder hereof to any rights of a stockholder of the Company.

Election to Purchase

(To Be Executed Upon Exercise of Warrant)

| g , , | exercise the right, represented by this Warrant Certificate, to rece | |
|---|---|---|
| | Xtant Medical Holdings, Inc. (the " <u>Company</u> ") in the amount of S | |
| | ate for such shares be registered in the name of | |
| | res be delivered to, whose address is | |
| | on Stock purchasable hereunder, the undersigned requests that a ne | |
| | the name of, whose address is | , and that such |
| Warrant Certificate be delivered to, wh | lose address is | |
| In the event that the Warrant is to be exercised | on a "cashless" basis pursuant to Section 3.3.2 of the Warrant Agu | reement, the number of shares that |
| the Warrants are exercisable for shall be determined in ac | ccordance with <u>Section 3.3.2</u> of the Warrant Agreement. | |
| a " <u>Cash Exercise</u> " with respect to | Warrant Shares; and/or | |
| | Warrant Shares, resulting in a delivery obligation the applicable Net Number, subject to adjustment. | by the Company to the Holder of |
| that the Warrants are exercisable for shall be determined exercise and (ii) the holder hereof shall complete the follower certificate, through the cashless exercise provisions of the shares of Common Stock purchasable hereunder (at representing the remaining balance of such shares be required.) | to the extent allowed by the Warrant Agreement, through cashles d in accordance with the relevant section of the Warrant Agreeme llowing: The undersigned hereby irrevocably elects to exercise the Warrant Agreement, to receive shares of Common Stock. If said fter giving effect to the cashless exercise), the undersigned reque gistered in the name of, whose address is, whose address is | ent which allows for such cashless e right, represented by this Warrant number of shares is less than all of ests that a new Warrant Certificate |
| Date:, 20 | (Signature) | |
| | (Address) | |
| | (Tax Identification Number) | |
| | | |

WARRANT AGREEMENT

THIS WARRANT AGREEMENT (this "<u>Agreement</u>"), dated as of ______, 2016, is by and between Xtant Medical Holdings, Inc., a Delaware corporation (the "<u>Company</u>"), and Corporate Stock Transfer, Inc., as the Warrant Agent (the "<u>Warrant Agent</u>").

WHEREAS, the Company is engaged in an offering (the "Offering") of shares of common stock of the Company, par value \$0.000001 per share ("Common Stock"), and warrants to purchase shares of Common Stock of the Company and, in connection therewith, has determined to issue and deliver up to 15,000,000 warrants to investors in the Offering, each such warrant evidencing the right of the holder thereof to purchase one share of Common Stock for \$0.90 per share, subject to adjustment as described herein (the "Warrants");

WHEREAS, the Company has filed with the Securities and Exchange Commission (the "<u>Commission</u>") a Registration Statement on Form S-1 (File No. 333-213350) (as the same may be amended from time to time, the "<u>Registration Statement</u>") for the registration, under the Securities Act of 1933, as amended (the "<u>Securities Act</u>"), of the shares of Common Stock and the Warrants to be sold to investors in the Offering and the shares of Common Stock underlying the Warrants;

WHEREAS, the Company desires the Warrant Agent to act on behalf of the Company, and the Warrant Agent is willing to so act, in connection with the issuance, registration, transfer, exchange and exercise of the Warrants;

WHEREAS, the Company desires to provide for the form and provisions of the Warrants, the terms upon which they shall be issued and exercised, and the respective rights, limitation of rights, and immunities of the Company, the Warrant Agent, and the holders of the Warrants, or if the Warrants are held in "street name", a Participant (as defined below) or a designee appointed by such Participant (each, a "Holder" or "Registered Holder"); and

WHEREAS, all acts and things have been done and performed which are necessary to make the Warrants, when executed on behalf of the Company and countersigned by or on behalf of the Warrant Agent, as provided herein, the valid, binding and legal obligations of the Company, and to authorize the execution and delivery of this Agreement.

NOW, THEREFORE, in consideration of the mutual agreements herein contained, the parties hereto agree as follows:

1. <u>Appointment of Warrant Agent</u>. The Company hereby appoints the Warrant Agent to act as agent for the Company for the Warrants, and the Warrant Agent hereby accepts such appointment and agrees to perform the same in accordance with the terms and conditions set forth in this Agreement.

2. Warrants.

2.1. <u>Form of Warrant</u>. Each Warrant shall be issued in registered form only and shall be in substantially the form of <u>Exhibit A</u> hereto, the provisions of which are incorporated herein. Each Warrant shall be signed by, or bear the facsimile signature of, the Chief Executive Officer, Chief Financial Officer, Secretary or other principal officer of the Company. In the event the person whose facsimile signature has been placed upon any Warrant shall have ceased to serve in the capacity in which such person signed the Warrant before such Warrant is issued, it may be issued with the same effect as if he or she had not ceased to be such at the date of issuance. All of the Warrants shall initially be represented by one or more book-entry positions (each, a "<u>Book-Entry Warrant</u>").

2.2. <u>Effect of Countersignature</u>. Unless and until countersigned by, or issued bearing the facsimile signature of the Warrant Agent pursuant to this Agreement, a Warrant shall be invalid and of no effect and may not be exercised by the holder thereof.

2.3. Registration.

- Warrant Register. The Warrant Agent shall maintain books (the "Warrant Register") for the registration of the original issuance 2.3.1. and the registration of transfer of the Warrants. Upon the initial issuance of the Warrants, the Warrant Agent shall issue and register the Warrants in the names of the respective holders thereof in such denominations and otherwise in accordance with instructions delivered to the Warrant Agent by the Company. To the extent the Warrants are eligible for the book entry and depository services of The Depository Trust Company ("DTC Eligible") as of the date of issuance (the "Issuance Date"), all of the Warrants shall be represented by one or more Book-Entry Warrant deposited with The Depository Trust Company (the "Depository") and registered in the name of Cede & Co., a nominee of the Depository. Ownership of beneficial interests in the Book-Entry Warrant shall be shown on, and the transfer of such ownership shall be effected through, records maintained (i) by the Depository or its nominee for each Book-Entry Warrant; (ii) by institutions that have accounts with the Depository (such institution, with respect to a Warrant in its account, a "Participant"); or (iii) directly on the book-entry records of the Warrant Agent with respect only to owners of beneficial interests represented by such direct registration. If the Warrants are not DTC Eligible as of the Issuance Date or the Depository subsequently ceases to make its book-entry settlement system available for the Warrants, the Company may instruct the Warrant Agent regarding making other arrangements for book-entry settlement within ten (10) days after the Depository ceases to make its book-entry settlement available. In the event that the Company does not make alternative arrangements for book-entry settlement within ten (10) days or the Warrants are not eligible for, or it is no longer necessary to have the Warrants available in, book-entry form, the Warrant Agent shall provide written instructions to the Depository to deliver to the Warrant Agent for cancellation each Book-Entry Warrant, and the Company shall instruct the Warrant Agent to deliver to the Depository definitive certificates ("Warrant Certificates") in physical form evidencing such Warrants. Such Warrant Certificates shall be in substantially the form annexed hereto as **Exhibit A**.
- 2.3.2. <u>Beneficial Owner; Registered Holder.</u> The term "beneficial owner" shall mean any person in whose name ownership of a beneficial interest in the Warrants evidenced by a Book-Entry Warrant is recorded in the records maintained by the Depository or its nominee. Prior to due presentment to the Warrant Agent for registration of transfer of any Warrant, the Company and the Warrant Agent may deem and treat the person in whose name such Warrant is registered in the Warrant Register as the absolute owner of such Warrant and of each Warrant represented thereby (notwithstanding any notation of ownership or other writing on the Warrant Certificate (as defined below) made by anyone other than the Company or the Warrant Agent), for the purpose of any exercise thereof, and for all other purposes, and neither the Company nor the Warrant Agent shall be affected by any notice to the contrary.
- 2.4. <u>Uncertificated Warrants</u>. Notwithstanding the foregoing and anything else herein to the contrary, the Warrants may be issued in uncertificated form.

3. <u>Terms and Exercise of Warrants</u>.

3.1. <u>Exercise Price</u>. Each Warrant shall, when countersigned by the Warrant Agent, entitle the Registered Holder thereof, subject to the provisions of such Warrant and of this Agreement, to purchase from the Company the number of shares of Common Stock stated therein, at the price of \$0.90 per share, subject to the adjustments provided herein. The term "<u>Exercise Price</u>" as used in this Agreement shall mean the price per share at which shares of Common Stock may be purchased at the time a Warrant is exercised.

| 3.2. | <u>Duration of Warrants</u> . A Warrant may be exercised only during the period (the " <u>Exercise Period</u> ") commencing on the Date of Issuance and |
|---------------------|---|
| ending on | , 2021 (the "Expiration Date"). Each Warrant not exercised on or before the Expiration Date shall become void, and all rights thereunder |
| and all rights in 1 | respect thereof under this Agreement shall cease at 5:00 PM Eastern Time on the Expiration Date. |

3.3. Exercise of Warrants.

- 3.3.1. <u>Payment</u>. Subject to the provisions of the Warrant and this Agreement, a Warrant, when countersigned by the Warrant Agent, may be exercised by the Registered Holder thereof by submitting a duly executed Election to Purchase attached to the applicable Warrant, at the office of the Warrant Agent or at the office of its successor as Warrant Agent, which may be done by fax or email delivery, and by paying, within two trading days of the date of exercise, in full the Exercise Price for each full share of Common Stock as to which the Warrant is exercised (the "<u>Aggregate Exercise Price</u>"), in lawful money of the United States, by cashier's check payable to the order of the Company or by Cashless Exercise, if permitted under, and in accordance with, <u>Section 3.3.2</u>. The Election to Purchase shall be required, along with a medallion guarantee (or other type of guarantee) of any Election to Purchase form that may be required; <u>provided</u>, <u>however</u>, that if the Company's transfer agent is not participating in the Depository's Fast Automated Securities Transfer Program and the Registered Holder requests that the shares of Common Stock be issued or registered to a holder other than the Registered Holder, then an ink-original Election to Purchase and a medallion guarantee shall be required. The Registered Holder may be required to deliver the original Warrant in order to effect an exercise hereunder.
- 3.3.2. <u>Cashless Exercise</u>. Notwithstanding anything contained herein to the contrary, if and only if an effective registration statement covering the issuance of the shares of Common Stock that are subject to the Election to Purchase is not available for the issuance of such shares of Common Stock, the Registered Holder may exercise a Warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to the Company upon such exercise in payment of the aggregate Exercise Price, elect instead to receive upon such exercise the "<u>Net Number</u>" of shares of Common Stock determined according to the following formula (a "<u>Cashless Exercise</u>"):

Net Number =
$$\frac{(A \times B) - (A \times C)}{B}$$

For purposes of the foregoing formula:

- A = the total number of shares with respect to which a Warrant is then being exercised.
- B = the arithmetic average of the Closing Sale Prices (as defined below) of the Common Stock for the five (5) consecutive trading days ending on the date immediately preceding the date the Warrant Agent receives the duly executed Election to Purchase.
- C = the Exercise Price then in effect for the applicable shares of Common Stock at the time of such exercise.

The term "Closing Sale Price" means, for any security as of any date, the last closing bid price and last closing trade price, respectively, for such security on the NYSE MKT, as reported by Bloomberg, or, if the NYSE MKT begins to operate on an extended hours basis and does not designate the closing bid price or the closing trade price, as the case may be, then the last bid price or the last trade price, respectively, of such security prior to 4:00:00 PM Eastern Time, as reported by Bloomberg, or, if the NYSE MKT is not the principal securities exchange or trading market for such security, the last closing bid price or last trade price, respectively, of such security is listed or traded as reported by Bloomberg, or if the foregoing do not apply, the last closing bid price or last trade price, respectively, of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg, or, if no closing bid price or last trade price, respectively, is reported for such security by Bloomberg, the average of the bid prices, or the ask prices, respectively, of any market makers for such security as reported in the OTC Link or "pink sheets" by OTC Markets Group Inc. (formerly Pink OTC Markets Inc.). If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Registered Holder. If the Company and the Registered Holder are unable to agree upon the fair market value of such security, then such dispute shall be resolved pursuant to Section 8.3. All such determinations to be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

In connection with any Cashless Exercise pursuant to this <u>Section 3.3.2</u>, the Warrant Agent will promptly deliver a copy of the Election to Purchase to the Company to confirm the Net Number of shares of Common Stock issuable in connection with the Cashless Exercise. The Company shall calculate and transmit to the Warrant Agent, and the Warrant Agent shall have no obligation under this <u>Section 3.3.2</u> to calculate, the Net Number of shares of Common Stock.

For purposes of Rule 144(d) promulgated under the Securities Act, as in effect on the date hereof, assuming the Registered Holder is not an affiliate of the Company, the shares of Common Stock issued in a Cashless Exercise shall be deemed to have been acquired by the Registered Holder, and the holding period for the shares of Common Stock shall be deemed to have commenced, on the date the Warrant was originally issued. Also, the shares of Common Stock issued in a Cashless Exercise shall take on the registered characteristics of the Warrant being exercised.

3.3.3. <u>Issuance of Common Stock on Exercise</u>. Assuming funds for exercise are paid on or before the second trading day following the date of receipt by the Company of an Election to Purchase, then on or before the third trading day following the date upon which the Company has received a duly executed Election to Purchase for a Warrant, the Company shall cause its transfer agent to (i) <u>provided</u> that the transfer agent is participating in the Depository's Fast Automated Securities Transfer Program, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with the Depository through its Deposit/Withdrawal at Custodian System, or (ii) if the transfer agent is not participating in the Depository's Fast Automated Securities Transfer Program, issue and deliver to the Holder, or at the Holder's instruction pursuant to the delivered Election to Purchase, the Holder's agent or designee, in each case pursuant to this clause (ii), sent by reputable overnight courier to the address specified in the applicable Election to Purchase, a certificate, registered in the Company's share register in the name of the Holder or its designee (as indicated in the applicable Election to Purchase), for the number of shares of Common Stock to which the Holder is entitled pursuant to such exercise. While any Warrants remain outstanding, the Company shall maintain a transfer agent that participates in the Depository's Fast Automated Securities Transfer Program.

3.3.4. <u>Valid Issuance</u>. All Common Stock issued or issuable upon the proper exercise of a Warrant in conformity with this Agreement shall be validly issued, fully paid and nonassessable.

- 3.3.5. <u>Date of Issuance</u>. Each person in whose name any certificate for the Common Stock is issued or to whom shares of Common Stock are credited to such person's account at the Depository shall for all purposes be deemed to have become the holder of record of such Common Stock as of the time that a duly executed Election to Purchase is delivered in accordance with <u>Section 3.3.1</u>, assuming, in the case of a Cash Exercise, payment of the Aggregate Exercise Price is made within two (2) trading days after the delivery of the Election to Purchase, and if the payment of the Aggregate Exercise Price is not made within two (2) trading days after the delivery of the Election to Purchase, the Holder shall be deemed to have become the holder of record of such Common Stock on the first trading day after the date on which the Aggregate Exercise Price has been paid, irrespective of the date of delivery of such certificate or the date the shares of Common Stock are credited to such person's account at the Depository, except that, if the date of such delivery and/or payment is a date when the stock transfer books of the Company are closed, such person shall be deemed to have become the holder of such shares at the close of business on the next succeeding date on which the stock transfer books are open.
- Share Delivery Failure. If the Company shall fail, for any reason or for no reason, to issue to the Holder within three (3) trading days after receipt of the applicable Election to Purchase (the "Share Delivery Deadline"), a certificate for the number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise of a Warrant or credit the Holder's balance account with the Depository for such number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise of the Warrants (as the case may be, but in each case without a restrictive legend) (a "Delivery Failure"), and if on or after such Share Delivery Deadline the Holder purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Holder of all or any portion of the number of shares of Common Stock issuable upon such exercise that the Holder so anticipated receiving from the Company, then, in addition to all other remedies available to it, the Company shall, within three (3) Business Days (as defined below) after the Holder's request and in the Holder's discretion, either (i) pay cash to the Holder in an amount equal to 100% of the Holder's total purchase price (including brokerage commissions and other out-of-pocket expenses, if any) for the shares of Common Stock so purchased (including, without limitation, by any other person in respect, or on behalf, of the Holder) (the "Buy-In Price"), at which point the Company's obligation to so issue and deliver such certificate or credit the Holder's balance account with the Depository for the number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise hereunder (as the case may be) (and to issue such shares of Common Stock) shall terminate, or (ii) promptly honor its obligation to so issue and deliver to the Holder a certificate or certificates representing such shares of Common Stock or credit the Holder's balance account with the Depository for the number of shares of Common Stock to which the Holder is entitled upon the Holder's exercise hereunder (as the case may be) and pay cash to the Holder in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of shares of Common Stock multiplied by (B) the lowest Closing Sale Price of the shares of Common Stock on any trading day during the period commencing on the date of the applicable Election to Purchase and ending on the date immediately preceding the date of such issuance and payment under this clause (ii). The term "Business Day" as used in this Agreement shall mean any day except a Saturday, a Sunday or any other day on which commercial banks are required or authorized to close in the City of New York, State of New York. [If the Company fails for any reason to deliver to the Holder the Common Stock subject to an Election to Purchase by the Share Delivery Deadline, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each \$1,000 of Common Stock subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Election to Purchase), \$10 per trading day (increasing to \$20 per trading day on the fifth trading day after such liquidated damages begin to accrue) for each trading day after such Share Delivery Deadline until such shares of Common Stock are delivered or Holder rescinds such exercise.] For the purposes of this provision "VWAP" means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on the NYSE MKT, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the NYSE MKT on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a trading day from 9:30 AM (Eastern Time) to 4:00 PM (Eastern Time)), (b) if the Common Stock is listed or quoted on the OTCQB or OTCQX, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock are then reported in the "Pink Sheets" published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holders of a majority in interest of the Warrants then outstanding and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

3.4. Beneficial Ownership Limitation on Exercises. The Company shall not affect the exercise of any portion of a Warrant, and the Registered Holder of such Warrant shall not have the right to exercise any portion of such Warrant, to the extent that after giving effect to such exercise, the Registered Holder (together with the Registered Holder's affiliates, and any persons acting as a group together with the Registered Holder or any Registered Holder's affiliates) would beneficially own in excess of 4.99% (the "Maximum Percentage") of the Common Stock outstanding immediately after giving effect to such exercise, provided, however, that the foregoing limitation on exercise shall not apply to any Registered Holder who, together with such Registered Holder's affiliates, and any persons acting as a group together with such Registered Holder and such Registered Holder's affiliates, owns in excess of the Maximum Percentage immediately prior to the closing of the Offering. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by such Registered Holder and its affiliates, and any persons acting as a group together with such Registered Holder and such Registered Holder's affiliates, shall include the number of shares of Common Stock issuable upon exercise of the Warrant with respect to which the determination of such sentence is being made, but shall exclude shares of Common Stock which would be issuable upon (i) exercise of the remaining, unexercised portion of the Warrant beneficially owned by the Registered Holder and its affiliates, and any persons acting as a group together with such Registered Holder and such Registered Holder's affiliates, and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company beneficially owned by the Registered Holder and its affiliates, and any persons acting as a group together with such Registered Holder and such Registered Holder's affiliates (including, without limitation, any convertible notes or convertible preferred stock or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein. Except as set forth in the preceding sentence, for purposes of this paragraph, beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The Warrant Agent shall not be responsible for calculating beneficial ownership in accordance with the provisions of this Section 3.4. To the extent that the limitation contained in this Section 3.4 applies, the Registered Holder's submission of an Election to Purchase shall be deemed to be the Registered Holder's determination of whether a Warrant is exercisable (in relation to any other securities owned by the Registered Holder together with any affiliates, and any persons acting as a group together with such Registered Holder and such Registered Holder's affiliates) and of which portion of a Warrant is exercisable, in each case subject to the Maximum Percentage, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of the Warrants, in determining the number of outstanding shares of Common Stock, the Registered Holder may rely on the number of outstanding shares of Common Stock as reflected in the most recent of (1) the Company's most recent Form 10-K, Form 10-Q, Current Report on Form 8-K or other public filing with the Commission, as the case may be, (2) a more recent written public announcement by the Company, or (3) any other notice by the Company or its transfer agent setting forth the number of shares of Common Stock outstanding. For any reason at any time, upon the written or oral request of the Registered Holder, the Company shall within three (3) trading days confirm to the Registered Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including any Warrant, by the Registered Holder and its affiliates, and any persons acting as a group together with such Registered Holder and such Registered Holder's affiliates, since the date as of which such number of outstanding shares of Common Stock was reported. By written notice to the Company, the Registered Holder may from time to time increase or decrease the Maximum Percentage to 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of a Warrant and the provisions of this Section 3.4 shall continue to apply; provided that (y) any such increase will not be effective until the sixty-first (61st) day after such notice is delivered to the Company, and (z) any such increase or decrease will apply only to that Registered Holder. For purposes of clarity, the Common Stock underlying any Warrant in excess of the Maximum Percentage for a Registered Holder shall not be deemed to be beneficially owned by that Registered Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. The provisions set forth herein shall be construed and implemented in a manner otherwise than in strict conformity with the other terms of this Section 3.4 to the extent necessary to correct any such provision which may be defective or inconsistent with the intended beneficial ownership limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation.

Call Provision. Subject to the provisions of Section 3.5, if, after the Date of Issuance, the VWAP (as defined in Section 3.3.6) for each of 3.5. 10 consecutive trading days (the "Measurement Period") exceeds \$2.25 (subject to adjustment for forward and reverse stock splits, recapitalizations, stock dividends and the like after the Issuance Date), then the Company may, within one trading day of the end of such Measurement Period, call for cancellation of all or any portion of the Warrants for which an Election to Purchase has not yet been delivered (such right, a "Call") for consideration equal to \$0.01 per share of Common Stock issuable on exercise of each Warrant. To exercise this right, the Company must deliver to the Holder an irrevocable written notice (a "Call Notice"), indicating therein the portion of unexercised portion of the Warrants to which such notice applies. If the conditions set forth below for such Call are satisfied from the period from the date of the Call Notice through and including the Call Date (as defined below), then any portion of the Warrants subject to such Call Notice for which an Election to Purchase shall not have been received by the Call Date will be cancelled at 6:30 PM (Eastern Time) on the tenth trading day after the date the Call Notice is received by the Registered Holder (such date and time, the "Call Date") for consideration equal to \$0.01 per share of Common Stock issuable upon exercise of such Warrants. Any unexercised portion of the Warrants to which the Call Notice does not pertain will be unaffected by such Call Notice. In furtherance thereof, the Company covenants and agrees that it will honor all Elections to Purchase with respect to Warrants subject to a Call Notice that are tendered through 6:30 PM (Eastern Time) on the Call Date. The parties agree that any Election to Purchase delivered following a Call Notice which calls less than all the Warrants shall first reduce to zero the number of shares of Common Stock issuable on exercise of the Warrants subject to such Call Notice prior to reducing the remaining shares of Common Stock available for purchase under the Warrants. For example, if (A) certain Warrants then permit the Registered Holder to purchase 100 shares of Common Stock, (B) a Call Notice pertains to 75 shares of Common Stock issuable on exercise of the Warrants, and (C) prior to 6:30 PM (Eastern Time) on the Call Date the Registered Holder tenders an Election to Purchase in respect of 50 shares of Common Stock, then (x) on the Call Date the right under the Warrants to purchase 25 shares of Common Stock will be automatically cancelled, (y) the Company, in the time and manner required under this Warrant Agreement, will have issued and delivered to the Registered Holder 50 shares of Common Stock in respect of the exercises following receipt of the Call Notice, and (z) the Holder may, until the Termination Date, exercise the Warrants for 25 shares of Common Stock (subject to adjustment as herein provided and subject to subsequent Call Notices). Subject again to the provisions of this Section 3.5, the Company may deliver subsequent Call Notices for any portion of the Warrants for which the Holder shall not have delivered an Election to Purchase. Notwithstanding anything to the contrary set forth in the Warrants, the Company may not deliver a Call Notice or require the cancellation of the Warrants (and any such Call Notice shall be void), unless, from the beginning of the Measurement Period through the Call Date, (1) the Company shall have honored in accordance with the terms of the Warrants all Elections to Purchase delivered by 6:30 PM (Eastern Time) on the Call Date, (2) the Common Stock shall be listed or quoted for trading on a principal securities exchange or trading market, and (3) there is a sufficient number of authorized shares of Common Stock for issuance of all shares of Common Stock issuable on exercise of the Warrants. The Company's right to call the Warrants under this Section 3.5 shall be exercised ratably among the Registered Holders.

4. Adjustments.

4.1. Stock Dividends.

- 4.1.1. <u>Split Ups</u>. If after the date hereof, and subject to the provisions of <u>Section 4.4</u>, the number of outstanding shares of Common Stock is increased by a stock dividend payable in Common Stock, or by a split-up of Common Stock or other similar event, then, on the effective date of such stock dividend, split-up or similar event, the number of shares of Common Stock issuable on exercise of each Warrant shall be increased in proportion to such increase in the outstanding shares of Common Stock and the Exercise Price shall be proportionally decreased such that the aggregate Exercise Price, after such adjustments, remains the same for each Warrant.
- 4.1.2. Dividends and Other Distributions. If the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction), except to the extent an adjustment was already made pursuant to Section 4.1.1 or 4.2 (a "Distribution"), at any time after the issuance of a Warrant, then, in each such case, the Company shall reserve and put aside the maximum Distribution amount the Holder would have been entitled to receive if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of the Warrant (without regard to any limitations on exercise hereof, including without limitation, the Maximum Percentage) immediately before the date on which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of Common Stock are to be determined for the participation in such Distribution. Upon exercise of a Warrant, in whole or in part, the Company shall, contemporaneously with the delivery of the shares of Common Stock issuable upon such exercise, distribute to the Holder a pro rata portion of such Distribution based on the portion of the Warrant that has been exercised (provided, however, to the extent that the Holder's right to participate in any such Distributions would result in the Holder exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Distribution at such time and to such extent (or the beneficial ownership of any such Common Stock as a result of such Distribution to such extent) and such Distribution to such extent shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Maximum Percentage, at which time or times the Holder shall be granted such Distribution (and any Distributions declared or made on such initial Distribution or on any subsequent Distribution to be held similarly in abeyance) to the same extent as if there had been no such limitation).
- 4.2. <u>Aggregation of Shares</u>. If after the date hereof, and subject to the provisions of <u>Section 4.5</u>, the number of outstanding shares of Common Stock is decreased by a consolidation, combination, reverse stock split or reclassification of Common Stock or other similar event, then, on the effective date of such consolidation, combination, reverse stock split, reclassification or similar event, the number of shares of Common Stock issuable on exercise of each Warrant shall be decreased in proportion to such decrease in outstanding shares of Common Stock and the Exercise Price shall be proportionally increased such that the aggregate Exercise Price, after such adjustments, remains the same for each Warrant.

- 4.3. <u>Subsequent Rights Offerings</u>. In addition to any adjustments stated herein, if at any time the Company grants, issues or sells any Common Stock equivalents or rights to purchase stock, warrants, securities or other property pro rata to all the record holders of any class of shares of Common Stock (the "<u>Purchase Rights</u>"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation on the Maximum Percentage immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the grant, issue or sale of such Purchase Rights (<u>provided</u>, <u>however</u>, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Maximum Percentage, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such shares of Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Maximum Percentage, at which time or times the Holder shall be granted such right (and any Purchase Right granted, issued or sold on such initial Purchase Right or on any subsequent Purchase Right to be held similarly in abeyance) to the same extent as if there had been no such limitation).
- Fundamental Transactions. If, at any time while the Warrants are outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another person, (ii) the Company, directly, or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another person or group of persons whereby such other person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other person or other persons making or party to, or associated or affiliated with the other persons making or party to, such stock or share purchase agreement or other business combination) (each a "Fundamental Transaction"), then, upon any subsequent exercise of a Warrant, the Holder of each Warrant shall have the right to receive, for each share of Common Stock that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 3.4 on the exercise of the Warrants), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which a Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 3.4 on the exercise of the Warrants). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the "Successor Entity") and for which stockholders of the Company received any equity securities of the Successor Entity to assume in writing all obligations of the Company under each Warrant in accordance with the provisions of this Section 4.3 pursuant to agreements in form and substance reasonably satisfactory to the Holders and approved by the Holders holding Warrants to purchase at least a majority of the shares of Common Stock underlying the then outstanding Warrants (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of each Holder, deliver to such Holder in exchange for such Holder's Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to such Holder's Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon exercise of such Warrant (without regard to the limitations on exercise set forth in Section 3.4) prior to such Fundamental Transaction, and with an exercise price which applies the Exercise Price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of such Warrant immediately prior to the consummation of such Fundamental Transaction). Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Agreement and each Warrant referring to the "Company" shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Agreement and each Warrant with the same effect as if such Successor Entity had been named as the Company herein.

- 4.5. <u>Calculations</u>. All calculations under this <u>Section 4</u> shall be made to the nearest cent or the nearest whole share, as the case may be. For purposes of this <u>Section 4</u>, any calculation of the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall not include treasury shares, if any. Notwithstanding anything to the contrary in this <u>Section 4</u>, no adjustment in the Exercise Price shall be required unless such adjustment would require an increase or decrease of at least 1% in such price; <u>provided</u>, <u>however</u>, that any adjustments which by reason of the immediately preceding sentence are not required to be made shall be carried forward and taken into account in any subsequent adjustment. In any case in which this <u>Section 4</u> shall require that an adjustment in the Exercise Price be made effective as of a record date for a specified event, if the Registered Holder exercises a Warrant after such record date, the Company may elect to defer, until the occurrence of such event, the issuance of the shares of Common Stock and other capital stock of the Company in excess of the shares of Common Stock and other capital stock of the Company, if any, issuable upon such exercise on the basis of the Exercise Price in effect prior to such adjustment; <u>provided</u>, <u>however</u>, that in such case the Company or the Warrant Agent shall deliver to the Registered Holder a due bill or other appropriate instrument evidencing the Registered Holder's right to receive such additional shares and/or other capital securities upon the occurrence of the event requiring such adjustment.
- 4.6. <u>Notices of Changes in Warrant</u>. Upon every adjustment of the Exercise Price or the number of shares issuable upon exercise of a Warrant, the Company shall give written notice thereof to the Warrant Agent, which notice shall state the Exercise Price resulting from such adjustment and the increase or decrease, if any, in the number of shares purchasable at such price upon the exercise of a Warrant, setting forth in reasonable detail the method of calculation and the facts upon which such calculation is based. Upon the occurrence of any event specified in <u>Sections 4.1</u>, <u>4.2</u> or <u>4.3</u>, the Company shall give written notice of the occurrence of such event to each Warrant holder, at the last address set forth for such holder in the Warrant Register, of the record date or the effective date of the event. Failure to give such notice, or any defect therein, shall not affect the legality or validity of such event.
- 4.7. <u>No Fractional Shares.</u> Notwithstanding any provision contained in this Agreement to the contrary, the Company shall not issue fractional shares upon exercise of Warrants. If, by reason of any adjustment made pursuant to this <u>Section 4</u>, the holder of any Warrant would be entitled, upon the exercise of such Warrant, to receive a fractional interest in a share, the Company shall, upon such exercise, round down to the nearest whole number the number of shares of Common Stock to be issued to such Holder. If fewer than all the Warrants evidenced by a Book-Entry Warrant are exercised, a notation shall be made to the records maintained by the Depository, its nominee for each Book-Entry Warrant, or a Participant, as appropriate, evidencing the balance of the Warrants remaining after such exercise.

4.8. <u>Form of Warrant</u>. The form of Warrant need not be changed because of any adjustment pursuant to this <u>Section 4</u>, and Warrants issued after such adjustment may state the same Exercise Price and the same number of shares as is stated in the Warrants initially issued pursuant to this Agreement.

5. <u>Transfer and Exchange of Warrants</u>.

- 5.1. Registration of Transfer. The Warrant Agent shall register the transfer, from time to time, of any outstanding Warrant upon the Warrant Register, upon surrender of such Warrant for transfer, properly endorsed with signatures properly guaranteed and accompanied by appropriate instructions for transfer. Upon any such transfer, a new Warrant representing an equal aggregate number of Warrants shall be issued and the old Warrant shall be cancelled by the Warrant Agent. The Warrants so cancelled shall be delivered by the Warrant Agent to the Company from time to time upon request.
- 5.2. <u>Procedure for Surrender of Warrants</u>. Warrants may be surrendered to the Warrant Agent, together with a written request for exchange or transfer, duly executed by the Registered Holder thereof, or by a duly authorized attorney, and thereupon the Warrant Agent shall issue in exchange therefor one or more new Warrants as requested by the Registered Holder of the Warrants so surrendered, representing an equal aggregate number of Warrants; <u>provided, however</u>, that except as otherwise provided herein or in any Book-Entry Warrant, each Book-Entry Warrant may be transferred only in whole and only to the Depository, to another nominee of the Depository, to a successor depository, or to a nominee of a successor depository.
- 5.3. <u>Fractional Warrants</u>. The Warrant Agent shall not be required to effect any registration of transfer or exchange which shall result in the issuance of a Book-Entry Warrant or Warrant Certificate for a fraction of a Warrant.
- 5.4. <u>Warrant Execution and Countersignature</u>. The Warrant Agent is hereby authorized to countersign and to deliver, in accordance with the terms of this Agreement, the Warrants required to be issued pursuant to the provisions of this <u>Section 5</u>.

6. Other Provisions Relating to Rights of Holders of Warrants.

- 6.1. No Rights as Stockholder. Except as otherwise specifically provided herein, a Registered Holder, solely in its capacity as a holder of a Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Agreement be construed to confer upon a Registered Holder, solely in its capacity as the Registered Holder of a Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Registered Holder of the shares of Common Stock which it is then entitled to receive upon the due exercise of a Warrant. A Warrant does not entitle the Registered Holder thereof to any of the rights of a stockholder.
- 6.2. <u>Lost, Stolen, Mutilated, or Destroyed Warrants</u>. If any Warrant is lost, stolen, mutilated, or destroyed, the Company or the Warrant Agent may require the Holder to furnish a bond of indemnity and/or an affidavit of loss in form satisfactory to the Warrant Agent and the Company before issuing a new Warrant to the Holder. Subject to the preceding sentence, and any other condition which the Warrant Agent or the Company may otherwise impose at their discretion (which shall, in the case of a mutilated Warrant, include the surrender thereof), the Company and the Warrant Agent may issue a new Warrant of like denomination, tenor, and date as the Warrant so lost, stolen, mutilated, or destroyed. Any such new Warrant shall constitute a substitute contractual obligation of the Company, whether or not the allegedly lost, stolen, mutilated, or destroyed Warrant shall be at any time enforceable by anyone.

6.3. <u>Reservation of Common Stock</u>. The Company shall at all times reserve and keep available a number of its authorized but unissued shares of Common Stock that shall be sufficient to permit the exercise in full of all outstanding Warrants issued pursuant to this Agreement.

7. <u>Concerning the Warrant Agent and Other Matters.</u>

7.1. <u>Payment of Taxes</u>. The Company shall from time to time promptly pay all taxes and charges that may be imposed upon the Company or the Warrant Agent in respect of the issuance or delivery of shares of Common Stock upon the exercise of the Warrants, but the Company shall not be obligated to pay any income taxes of the Holder in respect of the Warrants or such shares.

7.2. <u>Resignation, Consolidation, or Merger of Warrant Agent.</u>

- 7.2.1. Appointment of Successor Warrant Agent. The Warrant Agent, or any successor hereafter appointed, may resign its duties and be discharged from all further duties and liabilities hereunder after giving thirty (30) days' notice in writing to the Company. If the office of the Warrant Agent becomes vacant by resignation or incapacity to act or otherwise, the Company shall appoint in writing a successor Warrant Agent in place of the Warrant Agent. If the Company shall fail to make such appointment within a period of thirty (30) days after it has been notified in writing of such resignation or incapacity by the Warrant Agent or by the holder of a Warrant (who shall, with such notice, submit his Warrant for inspection by the Company), then the holder of any Warrant may apply for the appointment of a successor Warrant Agent at the Company's cost. Any successor Warrant Agent, whether appointed by the Company or by such court, shall be a corporation in good standing in the State of _______ and having its principal office in the City and State of _______, and authorized under such laws to exercise corporate trust powers and subject to supervision or examination by federal or state authority. After appointment, any successor Warrant Agent shall be vested with all the authority, powers, rights, immunities, duties, and obligations of its predecessor Warrant Agent with like effect as if originally named as the Warrant Agent hereunder, without any further act or deed; but if for any reason it becomes necessary or appropriate, the predecessor Warrant Agent shall execute and deliver, at the expense of the Company, an instrument transferring to such successor Warrant Agent all the authority, powers, and rights of such predecessor Warrant Agent hereunder; and upon request of any successor Warrant Agent the Company shall make, execute, acknowledge, and deliver any and all instruments in writing for more fully and effectually vesting in and confirming to such successor Warrant Agent all such authority, powers, rights, immuniti
- 7.2.2. <u>Notice of Successor Warrant Agent</u>. In the event a successor Warrant Agent shall be appointed, the Company shall give notice thereof to the predecessor Warrant Agent and the transfer agent for the Common Stock not later than the effective date of any such appointment.
- 7.2.3. <u>Merger or Consolidation of Warrant Agent</u>. Any company into which the Warrant Agent may be merged or with which it may be consolidated or any corporation resulting from any merger or consolidation to which the Warrant Agent shall be a party shall be the successor Warrant Agent under this Agreement without any further act.
- 7.3. <u>Fees and Expenses of Warrant Agent</u>. The Company will pay or cause to be paid to the Warrant Agent fees for the Warrant Agent's services hereunder as set forth in <u>Exhibit B</u> attached hereto, in each case payable upon the Warrant Agent's invoice to the Company. The Company agrees to pay the Warrant Agent any transfer agent fees which are in addition to the Warrant Agent fees and shall, pursuant to its obligations under this Agreement, reimburse the Warrant Agent upon demand for all expenditures that the Warrant Agent may reasonably incur in the execution of its duties hereunder.

7.3.1. <u>Further Assurances</u>. The Company agrees to perform, execute, acknowledge, and deliver or cause to be performed, executed, acknowledged, and delivered all such further and other acts, instruments, and assurances as may reasonably be required by the Warrant Agent for the carrying out or performing of the provisions of this Agreement.

7.4. <u>Liability of Warrant Agent</u>.

- 7.4.1. Reliance on Company Statement. Whenever in the performance of its duties under this Agreement, the Warrant Agent shall deem it necessary or desirable that any fact or matter be proved or established by the Company prior to taking or suffering any action hereunder, such fact or matter (unless other evidence in respect thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by a statement signed by the Chief Executive Officer, Chief Financial Officer, Secretary or other principal officer of the Company and delivered to the Warrant Agent. The Warrant Agent may rely upon such statement for any action taken or suffered in good faith by it pursuant to the provisions of this Agreement.
- 7.4.2. Indemnity. The Company will indemnify, defend, protect and hold harmless the Warrant Agent from and against any and all losses, liabilities, costs, damages or expenses, including, without limitation, reasonable attorneys' fees and expenses, incurred or made, arising out of or in connection with the performance of the Warrant Agent's obligations under the provisions of this Agreement, including but not limited to, acting, or refusing to act, in reliance upon any signature, endorsement, assignment, certificate, order, request, notice, report, record, instructions or other instrument or document believed by the Warrant Agent in good faith to be valid, genuine and sufficient; provided, however, such indemnification shall not apply to any losses, liabilities, costs, damages or expenses caused by the willful misconduct, bad faith or gross negligence of the Warrant Agent. The Warrant Agent shall be under no obligation to institute or defend any action, suit, or legal proceeding in connection herewith or to incur any expense related to any such action, suit or legal proceeding, unless first indemnified to the Warrant Agent's satisfaction. The indemnities provided by this paragraph shall survive the resignation or discharge of the Warrant Agent or the termination of this Agreement. Anything in this Agreement to the contrary notwithstanding, in no event shall the Warrant Agent or the Company be liable under or in connection with this Agreement for indirect, special, incidental, punitive or consequential losses or damages of any kind whatsoever, including but not limited to lost profits, whether or not foreseeable, even if the Warrant Agent or the Company have been advised of the possibility thereof and regardless of the form of action in which such damages are sought. The Warrant Agent or the Company have been advised of the Company's representatives or agents, under this Section 7.4.2 or under any other term or provision of this Agreement, whether in contract, tort, or otherwise, is expressly limited to, and shal
- 7.4.3. Exclusions. The Warrant Agent shall have no responsibility with respect to the validity of this Agreement or with respect to the validity or execution of any Warrant (except its countersignature thereof). The Warrant Agent shall not be responsible for any breach by the Company of any covenant or condition contained in this Agreement or in any Warrant. The Warrant Agent shall not be responsible to make any adjustments required under the provisions of Section 4 or responsible for the manner, method, or amount of any such adjustment or the ascertaining of the existence of facts that would require any such adjustment; nor shall it by any act hereunder be deemed to make any representation or warranty as to the authorization or reservation of any shares of Common Stock to be issued pursuant to this Agreement or any Warrant or as to whether any shares of Common Stock shall, when issued, be valid and fully paid and nonassessable.

7.5. Acceptance of Agency. The Warrant Agent hereby accepts the agency established by this Agreement and agrees to perform the same upon the terms and conditions herein set forth and among other things, shall account promptly to the Company with respect to Warrants exercised and concurrently account for, and pay to the Company, all monies received by the Warrant Agent for the purchase of shares of Common Stock through the exercise of the Warrants.

8. <u>Miscellaneous Provisions</u>.

- 8.1. <u>Successors</u>. All the covenants and provisions of this Agreement by or for the benefit of the Company or the Warrant Agent shall bind and inure to the benefit of their respective successors and assigns.
- 8.2. <u>Notices</u>. Any notice, statement or demand authorized by this Agreement to be given or made by the Warrant Agent or by the holder of any Warrant to or on the Company shall be sufficiently given (i) when so delivered if by hand or overnight delivery, (ii) when sent, if delivered by facsimile (<u>provided</u> that confirmation of transmission is mechanically or electronically generated and kept on file by the sending party) or by electronic mail, or (iii) if sent by certified mail or private courier service, within five (5) days after deposit of such notice, postage prepaid, addressed (until another address is filed in writing by the Company with the Warrant Agent), as follows:

Xtant Medical Holdings, Inc. 664 Cruiser Lane Belgrade, Montana 59714 Attention: John Gandolfo

By Email (which constitutes notice): jgandolfo@xtantmedical.com

Any notice, statement or demand authorized by this Agreement to be given or made by the holder of any Warrant or by the Company to or on the Warrant Agent shall be sufficiently given (a) upon receipt if by hand or overnight delivery, (b) when sent, if delivered by facsimile (<u>provided</u> that confirmation of transmission is mechanically or electronically generated and kept on file by the sending party) or by electronic mail, or (c) if sent by certified mail or private courier service, within five (5) days after deposit of such notice, postage prepaid, addressed (until another address is filed in writing by the Warrant Agent with the Company), as follows:

Corporate Stock Transfer, Inc. Attention: Carylyn Bell 3200 Cherry Creek Drive South, Suite 430 Denver, Colorado 80209

By Email (which constitutes notice): cbell@corporatestock.com

- 8.3. <u>Applicable Law.</u> The validity, interpretation, and performance of this Agreement and of the Warrants shall be governed in all respects by the laws of the State of Delaware, without giving effect to conflicts of law principles that would result in the application of the substantive laws of another jurisdiction.
- 8.4. <u>Persons Having Rights under this Agreement</u>. Nothing in this Agreement shall be construed to confer upon, or give to, any person or corporation other than the parties hereto and the Registered Holders of the Warrants any right, remedy, or claim under or by reason of this Agreement or of any covenant, condition, stipulation, promise, or agreement hereof. All covenants, conditions, stipulations, promises, and agreements contained in this Agreement shall be for the sole and exclusive benefit of the parties hereto and their successors and assigns and of the Registered Holders of the Warrants.

- 8.5. <u>Examination of the Warrant Agreement</u>. A copy of this Agreement shall be available at all reasonable times at the office of the Warrant Agent in State of Colorado, for inspection by the Registered Holder of any Warrant. The Warrant Agent may require any such Registered Holder to submit his Warrant for inspection by it.
- 8.6. <u>Counterparts</u>. This Agreement may be executed in any number of original or facsimile counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument. A signature to this Agreement transmitted electronically shall have the same authority, effect and enforceability as an original signature.
- 8.7. <u>Effect of Headings</u>. The section headings herein are for convenience only and are not part of this Agreement and shall not affect the interpretation thereof.
- 8.8. <u>Amendments</u>. This Agreement may be amended by the parties hereto with the written consent of the Company, the Warrant Agent and the Registered Holders holding Warrants to purchase at least a majority of the shares of Common Stock underlying the then outstanding Warrants. No consideration shall be offered by the Company to any Registered Holder in connection with a modification, amendment or waiver of this Agreement or any Warrant without also offering the same consideration to all Registered Holders.
- 8.9. <u>Severability</u>. This Agreement shall be deemed severable, and the invalidity or unenforceability of any term or provision hereof shall not affect the validity or enforceability of this Agreement or of any other term or provision hereof. Furthermore, in lieu of any such invalid or unenforceable term or provision, the parties hereto intend that there shall be added as a part of this Agreement a provision as similar in terms to such invalid or unenforceable provision as may be possible and be valid and enforceable.

[Signature Page Follows.]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed as of the date first above written.

XTANT MEDICAL HOLDINGS, INC.

By:
Name:
Title:

CORPORATE STOCK TRANSFER, INC.,
as Warrant Agent

By:
Name:
Title:

[Signature Page to Warrant Agreement.]

XTANT MEDICAL HOLDINGS, INC.

WARRANT TO PURCHASE COMMON STOCK

| | | Number of Shares: | |
|---|---|---|---|
| | | (subject to adju | stment) |
| Warrant No | | Original Issue Date: | _, 2016 |
| of which are her purchase from the such share, a "Was provided in Samon Stock in Same Date") and | reby ackine Comp Varrant Starrant Starr | Inc., a Delaware corporation (the " <u>Company</u> "), hereby certifies that, for good and valuable consideration, the receipt and suff nowledged, or its permitted registered assigns (the " <u>Holder</u> "), is entitled, subject to the terms set forth be any up to a total of shares of common stock, \$0.000001 par value per share (the " <u>Common Stock</u> "), of the Compan hare" and all such shares, the " <u>Warrant Shares</u> ") at an exercise price per share equal to \$0.01 per share (as adjusted from time be herein, the " <u>Exercise Price</u> "), upon surrender of this warrant to purchase Common Stock (including any warrants to per exchange, transfer or replacement hereof, the " <u>Warrant</u> ") at any time and from time to time on or after the date hereof (the " <u>Company</u> " and including 5:00 PM Eastern Time on the date that is five years following the Original Issue Date (the " <u>Expiration Date</u> terms and conditions: | elow, to y (each to time ourchase Original |
| 1. | <u>Definit</u> | tions. For purposes of this Warrant, the following terms shall have the following meanings: | |
| such Person. | (a) | "Affiliate" of any Person means any other Person directly or indirectly controlling, controlled by or under common controlled. | rol with |
| | (b) | "Commission" means the United States Securities and Exchange Commission and any successor entity thereto. | |
| designate the last Financial Market security as report the bid and ask calculated for a sa as mutually detect the Board of Dis Directors' detern | st trade parts, or if the ted by Be prices, consecurity or mined by rectors or mination | "Closing Sale Price" means, for any security as of any date, the last trade price for such security on the Principal Trading rted by Bloomberg Financial Markets, or, if such Principal Trading Market begins to operate on an extended hours basis and deprice, then the last trade price of such security immediately prior to 4:00 P.M., New York City time, as reported by Blo he foregoing do not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board of Bloomberg Financial Markets, or, if no last trade price is reported for such security by Bloomberg Financial Markets, the aveof any market makers for such security as reported in the "pink sheets" by Pink Sheets LLC. If the Closing Sale Price can a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security of the Company shall use its good faith judgment to determine the fair market value of such security on such date. The B shall be binding upon all parties absent demonstrable error. All such determinations shall be appropriately adjusted for an ack combination or other similar transaction during the applicable calculation period. | does not comberg for such erage of nnot be et value ity, then soard of |

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- (d) "Person" means any natural person, corporation, firm, joint venture, partnership, limited liability company, association, enterprise, trust or other entity or organization, or any government or political subdivision or any agency, department or instrumentality thereof.
- (e) "Principal Trading Market" means the trading market on which the Common Stock is primarily listed on and quoted for trading, and which, as of the Original Issue Date shall be the NYSE MKT LLC.
 - (f) "Securities Act" means the Securities Act of 1933, as amended.
 - (g) "Trading Day" means a day on which the Principal Trading Market is open for trading.
- 2. <u>Registration of Warrants</u>. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "<u>Warrant Register</u>"), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any registered assignee to which this Warrant is permissibly assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.
- 3. <u>Registration of Transfers</u>. Subject to compliance with all applicable securities laws, the Company shall register the transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, and payment of all applicable transfer taxes. Upon any such registration of transfer, a new warrant to purchase Common Stock in substantially the form of this Warrant (any such new warrant, a "<u>New Warrant</u>") evidencing the portion of this Warrant so transferred shall be issued to the transferee, and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder had in respect of this Warrant. The Company shall prepare, issue and deliver at the Company's own expense any New Warrant under this <u>Section 3</u>. Until due presentment for registration of transfer, the Company may treat the registered Holder hereof as the owner and holder of this Warrant for all purposes, and the Company shall not be affected by any notice to the contrary.

4. <u>Exercise and Duration of Warrants</u>.

- (a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by this Warrant at any time and from time to time on or after the Original Issue Date and through and including 5:00 PM Eastern Time on the Expiration Date; provided, however, that, if upon the Expiration Date, the Holder's exercise in full of this Warrant would cause the Holder's beneficial ownership of the Common Stock to exceed the Maximum Percentage, the term of this Warrant shall be automatically extended until, and this Warrant shall be automatically exercised on, the date that is the 90th day following the date on which this Warrant may be exercised in full without the Holder exceeding the Maximum Percentage. Subject to the foregoing sentence, at 5:00 PM Eastern Time on the Expiration Date, the portion of this Warrant not exercised prior thereto shall be void and of no value and this Warrant shall terminate and no longer be outstanding.
- (b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as Schedule 1 hereto (the "Exercise Notice"), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised (which may take the form of a "net share exercise" if so indicated in the Exercise Notice pursuant to Section 10 below), and the date on which the last of such items is delivered to the Company (as determined in accordance with the notice provisions hereof) is an "Exercise Date." If held in certificated form, the Holder shall be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant to the Holder evidencing its right to purchase the remaining number of Warrant Shares. For the avoidance of doubt, the Company may not substitute, and the Holder may not request, a cash payment in satisfaction of the Company's obligation to issue and deliver Warrant Shares pursuant to an Exercise Notice.

5. <u>Delivery of Warrant Shares</u>.

- Upon exercise of this Warrant, the Company shall promptly (but in no event later than three (3) Trading Days after the Exercise Date), upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with The Depository Trust Company ("DTC") through its Deposit Withdrawal Agent Commission system, or if the Company's transfer agent is not participating in the Fast Automated Securities Transfer Program (the "FAST Program") or if the certificates are required to bear a legend regarding restriction on transferability, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder is entitled pursuant to such exercise. The Holder, or any Person permissibly so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be.
- (b) To the extent permitted by law, the Company's obligations to issue and deliver Warrant Shares in accordance with and subject to the terms hereof (including the limitations set forth in Section 11 below) are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.
- 6. <u>Charges, Taxes and Expenses</u>. Issuance and delivery of certificates for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, transfer agent fee or other incidental tax or expense in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company; <u>provided</u>, <u>however</u>, that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or the Warrants in a name other than that of the Holder or an Affiliate thereof. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.
- 7. Replacement of Warrant. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable indemnity and surety bond, if requested by the Company. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

- 8. Reservation of Warrant Shares. The Company covenants that it will at all times while this Warrant is outstanding reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of this entire Warrant, free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 9). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized and issued, and fully paid and nonassessable. The Company will take all such action as may be reasonably necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed.
- 9. <u>Certain Adjustments</u>. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this <u>Section 9</u>.
- (a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, (ii) subdivides its outstanding shares of Common Stock into a larger number of shares of Common Stock (iii) combines its outstanding shares of Common Stock into a smaller number of shares of Common Stock or (iv) issues by reclassification of shares of capital stock any additional shares of Common Stock of the Company, then in each such case the Exercise Price shall be multiplied by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately before such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, provided, however, that if such record date shall have been fixed and such dividend is not fully paid on the date fixed therefor, the Exercise Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Exercise Price shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends. Any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination.
- (b) <u>Pro Rata Distributions</u>. If the Company, at any time while this Warrant is outstanding, distributes to all holders of Common Stock for no consideration (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by the preceding paragraph) or (iii) rights or warrants to subscribe for or purchase any security, or (iv) any other asset (in each case, "<u>Distributed Property</u>"), then, upon any exercise of this Warrant that occurs after the record date fixed for determination of stockholders entitled to receive such distribution, the Holder shall be entitled to receive, in addition to the Warrant Shares otherwise issuable upon such exercise (if applicable), the Distributed Property that such Holder would have been entitled to receive in respect of such number of Warrant Shares had the Holder been the record holder of such Warrant Shares immediately prior to such record date without regard to any limitation on exercise contained therein.

- Fundamental Transactions. If, at any time while this Warrant is outstanding (i) the Company effects any merger or consolidation of the Company with or into another Person, in which the Company is not the surviving entity or the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting power of the surviving entity immediately after such merger or consolidation, (ii) the Company effects any sale to another Person of all or substantially all of its assets in one or a series of related transactions, (iii) pursuant to any tender offer or exchange offer (whether by the Company or another Person), holders of capital stock who tender shares representing more than 50% of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, (iv) the Company consummates a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than the 50% of the voting power of the capital stock of the Company or (v) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 9(a) above) (in any such case, a "Fundamental Transaction"), then following such Fundamental Transaction the Holder shall have the right to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant without regard to any limitations on exercise contained herein (the "Alternate Consideration"). The Company shall not effect any Fundamental Transaction in which the Company is not the surviving entity or the Alternate Consideration includes securities of another Person unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or other Person (including any purchaser of assets of the Company) shall assume the obligation to deliver to the Holder, such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant.
- (d) <u>Number of Warrant Shares</u>. Simultaneously with any adjustment to the Exercise Price pursuant to paragraph (a) of this <u>Section 9</u>, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment.
- (e) <u>Calculations</u>. All calculations under this <u>Section 9</u> shall be made to the nearest cent or the nearest whole share, as the case may be. For purposes of this <u>Section 9</u>, any calculation of the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall not include treasury shares, if any. Notwithstanding anything to the contrary in this <u>Section 9</u>, no adjustment in the Exercise Price shall be required unless such adjustment would require an increase or decrease of at least 1% in such price; <u>provided</u>, <u>however</u>, that any adjustments which by reason of the immediately preceding sentence are not required to be made shall be carried forward and taken into account in any subsequent adjustment.
- (f) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 9, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder.

- (g) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any material definitive agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice of such transaction at least ten (10) days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction; provided, however, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice. In addition, if while this Warrant is outstanding, if the Company enters into any material definitive agreement contemplating or solicits stockholder approval for any Fundamental Transaction contemplated by Section 9(c), other than a Fundamental Transaction under clause (iii) of Section 9(c), the Company shall deliver to the Holder a notice of such Fundamental Transaction at least fifteen (15) days prior to the date such Fundamental Transaction is consummated. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any of its subsidiaries, the Holder shall keep such information confidential until the Company shall file such notice with the Commission pursuant to a Current Report on Form 8-K.
- 10. <u>Payment of Exercise Price</u>. Notwithstanding anything contained herein to the contrary, the Holder may, in its sole discretion, satisfy its obligation to pay the Exercise Price through a "net share exercise", in which event the Company shall issue to the Holder the number of Warrant Shares determined as follows:

X = Y [(A-B)/A]

where:

"X" equals the number of Warrant Shares to be issued to the Holder;

"Y" equals the total number of Warrant Shares with respect to which this Warrant is then being exercised;

"A" equals the average of the Closing Sale Prices of the shares of Common Stock for the five (5) consecutive Trading Days ending on the date immediately preceding the Exercise Date; and

"B" equals the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in a "cashless exercise" transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued (<u>provided</u> that the Commission continues to take the position that such treatment is proper at the time of such exercise).

Limitations on Exercise. The Company shall not affect the exercise of any portion of this Warrant, and the Holder shall not have the right to 11. exercise any portion of this Warrant, to the extent that after giving effect to such exercise, the Holder (together with the Holder's Affiliates, and any persons acting as a group together with the Holder or any Holder's Affiliates) would beneficially own in excess of 4.99% (the "Maximum Percentage") of the Common Stock outstanding immediately after giving effect to such exercise. For purposes of the foregoing sentence, the aggregate number of shares of Common Stock beneficially owned by the Holder and its Affiliates, and any persons acting as a group together with the Holder and the Holder's Affiliates, shall include the number of Warrant Shares with respect to which the determination of such sentence is being made, but shall exclude Warrant Shares which would be issuable upon (i) exercise of the remaining, unexercised portion of this Warrant beneficially owned by the Holder and its Affiliates, and any persons acting as a group together with the Holder and the Holder's Affiliates, and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company beneficially owned by the Holder and its Affiliates, and any persons acting as a group together with the Holder and the Holder's Affiliates (including, without limitation, any convertible notes or convertible preferred stock or warrants) subject to a limitation on conversion or exercise analogous to the limitation contained herein. Except as set forth in the preceding sentence, for purposes of this paragraph, beneficial ownership shall be calculated in accordance with Section 13(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The Company shall not be responsible for calculating beneficial ownership in accordance with the provisions of this Section 11. To the extent that the limitation contained in this Section 11 applies, the Holder's submission of an Exercise Notice shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to any other securities owned by the Holder together with any Affiliates, and any persons acting as a group together with the Holder and the Holder's Affiliates) and of which portion of this Warrant is exercisable, in each case subject to the Maximum Percentage, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Warrant, in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in the most recent of (1) the Company's most recent Form 10-K, Form 10-Q, Current Report on Form 8-K or other public filing with the Commission, as the case may be, (2) a more recent written public announcement by the Company, or (3) any other notice by the Company or its transfer agent setting forth the number of shares of Common Stock outstanding. For any reason at any time, upon the written or oral request of the Holder, the Company shall within three (3) Trading Days confirm to the Registered Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder and its Affiliates, and any persons acting as a group together with the Holder and the Holder's Affiliates, since the date as of which such number of outstanding shares of Common Stock was reported. By written notice to the Company, the Holder may from time to time increase or decrease the Maximum Percentage to 9.99% of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant and the provisions of this Section 11 shall continue to apply; provided that (y) any such increase will not be effective until the [sixty-first (61st)] day after such notice is delivered to the Company, and (z) any such increase or decrease will apply only to the Holder. For purposes of clarity, the Common Stock underlying this Warrant in excess of the Maximum Percentage for the Holder shall not be deemed to be beneficially owned by that Holder for any purpose including for purposes of Section 13(d) or Rule 16a-1(a)(1) of the Exchange Act. The provisions set forth herein shall be construed and implemented in a manner otherwise than in strict conformity with the other terms of this Section 11 to the extent necessary to correct any such provision which may be defective or inconsistent with the intended beneficial ownership limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation.

12. <u>No Fractional Shares</u>. No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares that would otherwise be issuable, the number of Warrant Shares to be issued shall be rounded down to the next whole number.

- Notices. Any and all notices or other communications or deliveries hereunder (including, without limitation, any Exercise Notice) shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile or confirmed e-mail at the facsimile number or e-mail address specified in the books and records of the Company prior to 5:00 PM Eastern Time on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or confirmed e-mail at the facsimile number or e-mail address specified in the books and records of the Company on a day that is not a Trading Day or later than 5:00 PM Eastern Time on any Trading Day, (iii) the Trading Day following the date of mailing, if sent by nationally recognized overnight courier service specifying next business day delivery, or (iv) upon actual receipt by the Person to whom such notice is required to be given, if by hand delivery.
- 14. <u>Warrant Agent</u>. Upon thirty (30) days' notice to the Holder, the Company may appoint a warrant agent to serve as warrant agent under this Warrant. Any such warrant agent shall promptly cause notice of its appointment as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

15. <u>Miscellaneous</u>.

(a) No Rights as a Stockholder. The Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company.

(b) Authorized Shares.

- (i) Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its articles of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (a) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (b) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant, and (c) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under this Warrant.
- (ii) Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

| (c) <u>Successors and Assigns</u> . Subject to the restrictions on transfer set forth in this Warrant and compliance with applicable s | securities |
|---|------------|
| laws, this Warrant may be assigned by the Holder. This Warrant shall be binding on and inure to the benefit of the Company and the Holder a | and their |
| respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the C | Company |
| and the Holder any legal or equitable right, remedy or cause of action under this Warrant. | |

- (d) <u>Amendment and Waiver</u>. This Warrant may be modified or amended or the provisions hereof waived with the written consent of the Company and the Holder.
- (e) <u>Acceptance</u>. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.
- (f) Governing Law; Jurisdiction. ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, ENFORCEMENT AND INTERPRETATION OF THIS WARRANT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF DELAWARE WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW THEREOF. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE CITY OF NEW YORK, BOROUGH OF MANHATTAN, FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR WITH ANY TRANSACTION CONTEMPLATED HEREBY OR DISCUSSED HEREIN (INCLUDING WITH RESPECT TO THE ENFORCEMENT OF ANY OF THE TRANSACTION DOCUMENTS), AND HEREBY IRREVOCABLY WAIVES, AND AGREES NOT TO ASSERT IN ANY SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF ANY SUCH COURT. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW. EACH OF THE COMPANY AND THE HOLDER HEREBY WAIVES ALL RIGHTS TO A TRIAL BY JURY.
- (g) <u>Headings</u>. The headings herein are for convenience only, do not constitute a part of this Warrant and shall not be deemed to limit or affect any of the provisions hereof.
- (h) <u>Severability</u>. In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby, and the Company and the Holder will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

[Signature Page Follows.]

| IN WITNESS WHEREOF , the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above. |
|---|
| XTANT MEDICAL HOLDINGS, INC. |
| Ву: |
| Name: |
| Title: |
| [Signature Page to Warrant] |

NOTICE OF EXERCISE

| TO: X | STANT MEDICAL HOLDINGS, INC. |
|-----------------|--|
| Holdings, | The undersigned Holder hereby exercises the right to purchase shares of Common Stock (" <u>Warrant Shares</u> ") of Xtant Medical Inc., a Delaware corporation (the " <u>Company</u> "), evidenced by Warrant No (the " <u>Warrant</u> "). Capitalized terms used herein and not defined shall have the respective meanings set forth in the Warrant. |
| 1 | . Form of Exercise Price. The Holder intends that payment of the Exercise Price shall be made as: |
| | a "cash exercise" with respect to Warrant Shares; and/or |
| | a "net share exercise" pursuant to Section 10 of the Warrant with respect to Warrant Shares. |
| | Warrant Shares shall be issued in the name of the undersigned Holder or in such other name as is specified below: |
| 2 Warrant S | Payment of Exercise Price: Cash Exercise. In the event that the Holder has elected a "cash exercise" with respect to some or all of the hares, the Holder shall pay the Exercise Price in the sum of \$ to the Company in accordance with the terms of the Warrant. |
| Financial | Payment of Exercise Price: Net Share Exercise. In the event that the Holder has elected a net share exercise with respect to some or all of nt Shares, the Holder represents and warrants that the average of the Closing Sale Prices of the shares of Common Stock (as reported by Bloomberg Markets) for the five (5) consecutive Trading Days ending on the date immediately preceding the Exercise Date is \$ The calculation of the Warrant Shares to be issued in accordance with Section 10 of the Warrant is as follows: |
| | <u>Delivery of Warrant Shares</u> . The Company shall cause the Warrant Agent to deliver to Holder, or its designee or agent as specified above, shares of Common Stock in respect of the exercise contemplated hereby. The Warrant Shares shall be delivered to the following DWAC Number or by physical delivery of a certificate to: |
| Date: | |
| Name of I | Registered Holder |
| By: | |
| Name: Title: | |

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: November 10, 2016

/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: November 10, 2016

/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 September 30, 2016 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: November 10, 2016

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 September 30, 2016 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: November 10, 2016