

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 8-K

CURRENT REPORT  
Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of report (Date of earliest event reported): December 28, 2017

**XTANT MEDICAL HOLDINGS, INC.**

(Exact Name of Registrant as Specified in Its Charter)

Delaware  
(State or Other Jurisdiction of Incorporation)

001-34951  
(Commission File Number)

20-5313323  
(IRS Employer Identification No.)

664 Cruiser Lane  
Belgrade, Montana  
(Address of Principal Executive Offices)

59714  
(Zip Code)

(406) 388-0480  
(Registrant's Telephone Number, Including Area Code)

Not applicable  
(Former Name or Former Address, if Changed Since Last Report)

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

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

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (17 CFR §230.405) or Rule 12b-2 of the Securities Exchange Act of 1934 (17 CFR §240.12b-2).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

**Item 1.01. Entry into a Material Definitive Agreement**

*Twenty-First Amendment to Amended and Restated Credit Agreement*

Effective December 28, 2017, Bacterin International, Inc. (“Bacterin”), a Nevada corporation and wholly-owned subsidiary of Xtant Medical Holdings, Inc. (the “Company”), as borrower, the Company, X-Spine Systems, Inc., an Ohio corporation and wholly-owned subsidiary of the Company, and Xtant Medical, Inc., a Delaware corporation and wholly-owned subsidiary of the Company, collectively as the guarantors, and ROS Acquisition Offshore LP (“ROS”) and OrbiMed Royalty Opportunities II, LP (“Royalty Opportunities”), entered into the Twenty-First Amendment to Amended and Restated Credit Agreement (the “Facility Amendment”), which amended the existing Amended and Restated Credit Agreement, dated as of July 27, 2015 (the “Facility”).

Prior amendments to the Facility deferred Bacterin’s accrued interest payment date for the fiscal quarters ended on December 31, 2016, March 31, 2017, June 30, 2017 and September 30, 2017 until December 31, 2017. The Facility Amendment further defers Bacterin’s accrued interest payment date for the fiscal quarters ended on December 31, 2016, March 31, 2017, June 30, 2017, September 30, 2017 and December 31, 2017 until January 31, 2018.

The interest due on January 31, 2018 for the fiscal quarter ended on December 31, 2016 will be \$1,147,329.47, plus interest accrued on such interest from January 2, 2017 until paid at a rate equal to 14% plus the higher of the LIBO Rate (as defined in the Facility) for the fiscal quarter ended on December 31, 2016, or 1%. The interest due on January 31, 2018 for the fiscal quarter ended on March 31, 2017 will be \$1,139,597.47, plus interest accrued on such interest from April 1, 2017 until paid at a rate equal to 14% plus the higher of the LIBO Rate for the fiscal quarter ended on March 31, 2017, or 1%. The interest due on January 31, 2018 for the fiscal quarter ended on June 30, 2017 will be \$1,303,935.46, plus interest accrued on such interest from July 1, 2017 until paid at a rate equal to 14% plus the higher of the LIBO Rate for the fiscal quarter ended on June 30, 2017, or 1%. The interest due on January 31, 2018 for the fiscal quarter ended on September 30, 2017 will be \$1,482,405.68, plus interest accrued on such interest from October 2, 2017 until paid at a rate equal to 14% plus the higher of the LIBO Rate for the fiscal quarter ended on September 30, 2017, or 1%. The interest due on January 31, 2018 for the fiscal quarter ended on December 31, 2017 will be \$1,521,262.30, plus interest accrued on such interest from January 2, 2018 until paid at a rate equal to 14% plus the higher of the LIBO Rate for the fiscal quarter ended on December 31, 2017, or 1%.

The Facility Amendment also modified the minimum liquidity financial covenant of the Facility by allowing the Company and its subsidiaries to maintain a liquidity amount of not less than \$100,000 until January 31, 2018. At all times after January 31, 2018, the liquidity of the Company and its subsidiaries must not be less than \$5,000,000.

*Amendment Number 5 to Indenture*

Effective December 29, 2017, the Company and Wilmington Trust, National Association (the “Trustee”), entered into the Amendment Number 5 to Indenture (the “Indenture Amendment”), which amended the existing Indenture, dated as of July 31, 2015, and as amended thereafter (the “Indenture”).

The Indenture Amendment amended the Indenture by moving the payment date of interest accrued on notes issued under the Indenture as follows: (a) for interest accrued on the such notes that was originally required to be paid on July 15, 2017, from December 31, 2017 to January 31, 2018, and (b) for interest accrued on the such notes that is required to be paid on January 15, 2018, from January 15, 2018 to January 31, 2018. The Indenture Amendment also set the record dates for the January 31, 2018 interest payments at June 30, 2017 and December 31, 2017, respectively, and waived any event of default that may have occurred as a result of the non-payment of interest on July 15, 2017 or January 15, 2018. The interest payments due on January 31, 2018 will include interest accrued on such interest from July 15, 2017 and January 15, 2018, respectively, to the date of payment thereof at a rate equal to 6.00% per annum plus 100 basis points.

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*Fifth Amendment and Waiver to Convertible Promissory Notes*

Effective December 28, 2017, the Company, ROS and Royalty Opportunities entered into the Fifth Amendment and Waiver (the “Notes Amendment”), which amended certain Convertible Promissory Notes held by ROS and OrbiMed that were issued by the Company on April 14, 2016 and January 17, 2017 (collectively, the “Notes”).

The Notes Amendment amended the Notes by moving the payment date of interest accrued on the Notes as follows: (a) for interest accrued on the Notes that was originally required to be paid on July 15, 2017, from December 31, 2017 to January 31, 2018, and (b) for interest accrued on the Notes that is required to be paid on January 15, 2018, from January 15, 2018 to January 31, 2018. The Notes Amendment also waived any event of default that may have occurred as a result of the non-payment of interest on July 15, 2017 or January 15, 2018. The interest payment due on January 31, 2018 will include interest accrued on such interest from July 15, 2017 and January 15, 2018, respectively, to the date of payment thereof at a rate equal to 6.00% per annum plus 100 basis points.

The foregoing descriptions of the Facility Amendment, the Indenture Amendment and the Notes Amendment do not purport to be complete and are qualified in their entirety by the full text of the Facility Amendment, the Indenture Amendment and the Notes Amendment, copies of which are filed as Exhibits 10.1, 10.2 and 10.3 and incorporated by reference herein.

**Item 2.03. Creation of Direct Financial Obligation or an Obligation Under an Off-Balance Sheet Arrangement.**

The disclosures set forth above under Item 1.01 are hereby incorporated by reference into this Item 2.03.

**Item 9.01. Financial Statements and Exhibits.**

(d) Exhibits.

<u>Exhibit No.</u>	<u>Description</u>
<a href="#"><u>10.1</u></a>	<a href="#"><u>Twenty-First Amendment to Amended and Restated Credit Agreement, dated as of December 28, 2017, by and among Bacterin International, Inc., Xtant Medical Holdings, Inc., X-Spine Systems, Inc., Xtant Medical, Inc., ROS Acquisition Offshore LP and OrbiMed Royalty Opportunities II, LP.</u></a>
<a href="#"><u>10.2</u></a>	<a href="#"><u>Amendment Number 5 to Indenture, dated as of December 29, 2017, by and between Xtant Medical Holdings, Inc. and Wilmington Trust, National Association.</u></a>
<a href="#"><u>10.3</u></a>	<a href="#"><u>Fifth Amendment and Waiver, dated as of December 28, 2017, by and among Xtant Medical Holdings, Inc., ROS Acquisition Offshore LP and OrbiMed Royalty Opportunities II, LP.</u></a>

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: December 29, 2017

**XTANT MEDICAL HOLDINGS, INC.**

By: /s/ Carl D. O'Connell

Name: Carl D. O'Connell

Title: Chief Executive Officer

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**EXHIBIT INDEX**

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**TWENTY-FIRST AMENDMENT TO AMENDED AND RESTATED CREDIT AGREEMENT**

This **TWENTY-FIRST AMENDMENT TO AMENDED AND RESTATED CREDIT AGREEMENT** (this "Amendment") is made and entered into as of December 28, 2017 (the "Amendment Closing Date") by and among **BACTERIN INTERNATIONAL, INC.**, a Nevada corporation (the "Borrower"), **ROS ACQUISITION OFFSHORE LP**, a Cayman Islands Exempted Limited Partnership ("ROS"), **ORBIMED ROYALTY OPPORTUNITIES II, LP**, a Delaware limited partnership ("Royalty Opportunities"), and, in their capacity as Guarantors under the Credit Agreement (as defined below), **XTANT MEDICAL HOLDINGS, INC.**, a Delaware corporation ("Holdings"), **X-SPINE SYSTEMS, INC.**, an Ohio corporation ("X-Spine" or the "Additional Delayed Draw Borrower" and, together with the Borrower, the "Borrowers") and **XTANT MEDICAL, INC.**, a Delaware corporation ("Xtant" and, along with Holdings and X-Spine, collectively, the "Guarantors").

**WHEREAS**, the Borrowers, ROS and Royalty Opportunities are party to that certain Amended and Restated Credit Agreement, dated as of July 27, 2015, as amended by that certain First Amendment to Amended and Restated Credit Agreement, dated as of March 31, 2016, that certain Second Amendment to Amended and Restated Credit Agreement, dated as of May 25, 2016, that certain Third Amendment to Amended and Restated Credit Agreement, dated as of June 30, 2016, that certain Fourth Amendment to Amended and Restated Credit Agreement, dated as of July 29, 2016, that certain Fifth Amendment to the Amended and Restated Credit Agreement, dated as of August 12, 2016, that certain Sixth Amendment to the Amended and Restated Credit Agreement, dated as of September 27, 2016, that certain Seventh Amendment to the Amended and Restated Credit Agreement, dated as of December 31, 2016, that certain Eighth Amendment to Amended and Restated Credit Agreement, dated as of January 13, 2017, that certain Ninth Amendment to Amended and Restated Credit Agreement, dated as of January 31, 2017, that certain Tenth Amendment to Amended and Restated Credit Agreement, dated as of February 14, 2017, that certain Eleventh Amendment to Amended and Restated Credit Agreement, dated as of February 28, 2017, that certain Twelfth Amendment and Waiver to Amended and Restated Credit Agreement, dated as of March 31, 2017, that certain Thirteenth Amendment to Amended and Restated Credit Agreement, dated as of April 30, 2017, that certain Fourteenth Amendment to Amended and Restated Credit Agreement, dated as of May 11, 2017, that certain Fifteenth Amendment to Amended and Restated Credit Agreement, dated as of June 30, 2017, that certain Sixteenth Amendment to Amended and Restated Credit Agreement, dated as of July 15, 2017, that certain Seventeenth Amendment and Waiver to Amended and Restated Credit Agreement, dated as of August 11, 2017, that certain Eighteenth Amendment to Amended and Restated Credit Agreement, dated as of September 29, 2017, that certain Nineteenth Amendment to Amended and Restated Credit Agreement, dated as of October 31, 2017, that certain Waiver, dated as of November 14, 2017, and that certain Twentieth Amendment and Waiver to Amended and Restated Credit Agreement, dated as of November 30, 2017 (the "Credit Agreement"), pursuant to which (i) ROS and Royalty Opportunities, as Lenders under the Credit Agreement, have extended credit to the Borrowers on the terms set forth therein and (ii) each Lender has appointed ROS as the administrative agent (the "Administrative Agent") for the Lenders;

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**WHEREAS**, the Guarantors and the Administrative Agent entered into an Amended and Restated Guarantee, dated as of July 31, 2015 and supplemented on September 11, 2015, pursuant to which the Guarantors have agreed to guarantee the Obligations of the Borrowers under the Credit Agreement;

**WHEREAS**, pursuant to Section 11.1 of the Credit Agreement, the Credit Agreement may be amended by an instrument in writing signed by each of the Borrowers and the Administrative Agent (acting on behalf of the Lenders); and

**WHEREAS**, the Borrowers and the Lenders desire to amend certain provisions of the Credit Agreement as provided in this Amendment.

**NOW, THEREFORE**, in consideration of the mutual agreements herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. **Definitions; Loan Document**. Capitalized terms used herein without definition shall have the meanings assigned to such terms in the Credit Agreement. This Amendment shall constitute a Loan Document for all purposes of the Credit Agreement and the other Loan Documents.

2. **Amendments to Section 7.1(a)**. Section 7.1(a) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

“(a) as soon as available and in any event within 30 days after the end of each calendar month, in each case with supporting detail and certified as complete and correct by the chief financial or accounting Authorized Officer of the Borrower (subject to normal year-end audit adjustments), for Holdings and its consolidated Subsidiaries: (i) unaudited reports of the Consolidated EBITDA and Revenue Base for such calendar month and the Liquidity at the end of such calendar month and (ii) unaudited reports of (x) the Revenue Base and Consolidated EBITDA for the period commencing at the end of the previous Fiscal Year and ending with the end of such calendar month, and including in comparative form the figures for the corresponding calendar month in, and the year to date portion of, the immediately preceding Fiscal Year and (y) the Liquidity for the corresponding calendar month in the preceding Fiscal Year, in comparative form;”

3. **Amendments to Section 3.6**. Section 3.6 of the Credit Agreement is hereby amended by deleting the last sentence from such Section 3.6 in its entirety and inserting the following as the last sentence thereof:

“Notwithstanding the foregoing, interest accrued on the Loans for the Fiscal Quarters ended on December 31, 2016, March 31, 2017, June 30, 2017, September 30, 2017 and December 31, 2017 and otherwise required to be paid in cash on January 2, 2017, March 31, 2017, June 30, 2017, October 2, 2017 and January 2, 2018, respectively, shall instead be required to be paid in cash on January 31, 2018, plus interest accrued on such interest from January 2, 2017, March 31, 2017, June 30, 2017, October 2, 2017 and January 2, 2018, as applicable, to the date of payment thereof at a rate equal to the Applicable Margin plus the higher of (i) the LIBO Rate for the Fiscal Quarter ended on December 31, 2016, the Fiscal Quarter ended on March 31, 2017, the Fiscal Quarter ended on June 30, 2017, the Fiscal Quarter ended on September 30, 2017 or the Fiscal Quarter ended on December 31, 2017, as applicable, and (ii) 1.00%.”

4. **Amendments to Section 8.4(a)**. Section 8.4(a) of the Credit Agreement is hereby amended and restated in its entirety to read as follows:

“(a) **Minimum Revenue Base**. The Revenue Base for any Fiscal Quarter shall not be less than the amount set forth below for such Fiscal Quarter:

<b><u>Fiscal Quarter Ending</u></b>	<b><u>Minimum Revenue Base</u></b>
September 30, 2015	\$ 17,500,000
December 31, 2015	\$ 20,000,000
March 31, 2016	\$ 20,000,000
June 30, 2016	\$ 20,000,000
September 30, 2016	\$ 20,000,000
December 31, 2016	\$ 20,000,000
March 31, 2017	\$ 20,000,000
June 30, 2017	\$ 20,000,000
September 30, 2017	\$ 19,500,000
December 31, 2017	\$ 19,000,000
March 31, 2018	\$ 27,500,000
June 30, 2018	\$ 27,500,000
September 30, 2018	\$ 30,000,000
December 31, 2018	\$ 30,000,000
March 31, 2019	\$ 30,000,000
June 30, 2019	\$ 30,000,000
September 30, 2019	\$ 30,000,000
December 31, 2019	\$ 30,000,000
March 31, 2020	\$ 30,000,000
June 30, 2020	\$ 30,000,000

5. **Amendments to Section 8.4(b)**. Section 8.4(b) of the Credit Agreement is hereby amended by deleting the first two sentences from such Section 8.4(b) in their entirety and inserting the following as the first two sentences thereof:

“At all times prior to January 31, 2018, the Liquidity shall not be less than \$100,000. At all times after January 31, 2018, the Liquidity shall not be less than \$5,000,000.”

6. **Conditions to Effectiveness of Amendment**. This Amendment shall become effective upon receipt by the Borrowers, the Administrative Agent, the Lenders and the Guarantors of a counterpart signature of the others to this Amendment duly executed and delivered by each of the Borrowers, the Lenders, the Administrative Agent and the Guarantors.



7. **Expenses.** The Borrowers agree to pay on demand all expenses of the Administrative Agent (including, without limitation, the fees and out-of-pocket expenses of Covington & Burling LLP, counsel to the Administrative Agent) incurred in connection with the Administrative Agent's review, consideration and evaluation of this Amendment, including the rights and remedies available to it in connection therewith, and the negotiation, preparation, execution and delivery of this Amendment.

8. **Representations and Warranties.** The Borrowers and the Guarantors represent and warrant to each Lender as follows:

(a) After giving effect to this Amendment, the representations and warranties of the Borrowers and the Guarantors contained in the Credit Agreement or any other Loan Document shall, (i) with respect to representations and warranties that contain a materiality qualification, be true and correct in all respects on and as of the date hereof, and (ii) with respect to representations and warranties that do not contain a materiality qualification, be true and correct in all material respects on and as of the date hereof, and except that the representations and warranties limited by their terms to a specific date shall be true and correct as of such date.

(b) Before and after giving effect to this Amendment, no Default or Event of Default under the Credit Agreement has occurred or will occur or be continuing.

9. **No Implied Amendment or Waiver.** Except as expressly set forth in this Amendment, this Amendment shall not, by implication or otherwise, limit, impair, constitute a waiver of or otherwise affect any rights or remedies of the Administrative Agent or the Lenders under the Credit Agreement or the other Loan Documents, or alter, modify, amend or in any way affect any of the terms, obligations or covenants contained in the Credit Agreement or the other Loan Documents, all of which shall continue in full force and effect. Nothing in this Amendment shall be construed to imply any willingness on the part of the Administrative Agent or the Lenders to agree to or grant any similar or future amendment, consent or waiver of any of the terms and conditions of the Credit Agreement or the other Loan Documents.

10. **Waiver and Release.** TO INDUCE THE ADMINISTRATIVE AGENT, ACTING ON BEHALF OF THE LENDERS, TO AGREE TO THE TERMS OF THIS AMENDMENT, THE BORROWERS, THE GUARANTORS AND THEIR AFFILIATES (COLLECTIVELY, THE RELEASING PARTIES) REPRESENT AND WARRANT THAT AS OF THE DATE HEREOF THERE ARE NO CLAIMS OR OFFSETS AGAINST OR RIGHTS OF RECOUPMENT WITH RESPECT TO OR DEFENSES OR COUNTERCLAIMS TO THEIR OBLIGATIONS UNDER THE LOAN DOCUMENTS AND IN ACCORDANCE THEREWITH THEY:

(a) WAIVE ANY AND ALL SUCH CLAIMS, OFFSETS, RIGHTS OF RECOUPMENT, DEFENSES OR COUNTERCLAIMS, WHETHER KNOWN OR UNKNOWN, ARISING PRIOR TO THE DATE HEREOF; AND

(b) FOREVER RELEASE, RELIEVE, AND DISCHARGE THE ADMINISTRATIVE AGENT, THE LENDERS, THEIR OFFICERS, DIRECTORS, SHAREHOLDERS, MEMBERS, PARTNERS, PREDECESSORS, SUCCESSORS, ASSIGNS, ATTORNEYS, ACCOUNTANTS, AGENTS, EMPLOYEES, AND REPRESENTATIVES (COLLECTIVELY, THE "RELEASED PARTIES"), AND EACH OF THEM, FROM ANY AND ALL CLAIMS, LIABILITIES, DEMANDS, CAUSES OF ACTION, DEBTS, OBLIGATIONS, PROMISES, ACTS, AGREEMENTS, AND DAMAGES, OF WHATEVER KIND OR NATURE, WHETHER KNOWN OR UNKNOWN, SUSPECTED OR UNSUSPECTED, CONTINGENT OR FIXED, LIQUIDATED OR UNLIQUIDATED, MATURED OR UNMATURED, WHETHER AT LAW OR IN EQUITY, WHICH THE RELEASING PARTIES EVER HAD, NOW HAVE, OR MAY, SHALL, OR CAN HEREAFTER HAVE, DIRECTLY OR INDIRECTLY ARISING OUT OF OR IN ANY WAY BASED UPON, CONNECTED WITH, OR RELATED TO MATTERS, THINGS, ACTS, CONDUCT, AND/OR OMISSIONS AT ANY TIME FROM THE BEGINNING OF THE WORLD THROUGH AND INCLUDING THE DATE HEREOF, INCLUDING WITHOUT LIMITATION ANY AND ALL CLAIMS AGAINST THE RELEASED PARTIES ARISING UNDER OR RELATED TO THE LOAN DOCUMENTS OR THE TRANSACTIONS CONTEMPLATED THEREBY.

(c) IN CONNECTION WITH THE RELEASE CONTAINED HEREIN, THE RELEASING PARTIES ACKNOWLEDGE THAT THEY ARE AWARE THAT THEY MAY HEREAFTER DISCOVER CLAIMS PRESENTLY UNKNOWN OR UNSUSPECTED, OR FACTS IN ADDITION TO OR DIFFERENT FROM THOSE WHICH THEY KNOW OR BELIEVE TO BE TRUE, WITH RESPECT TO THE MATTERS RELEASED HEREIN. NEVERTHELESS, IT IS THE INTENTION OF THE RELEASING PARTIES, THROUGH THIS AGREEMENT AND WITH ADVICE OF COUNSEL, FULLY, FINALLY, AND FOREVER TO RELEASE ALL SUCH MATTERS, AND ALL CLAIMS RELATED THERETO, WHICH DO NOW EXIST, OR HERETOFORE HAVE EXISTED. IN FURTHERANCE OF SUCH INTENTION, THE RELEASES HEREIN GIVEN SHALL BE AND REMAIN IN EFFECT AS A FULL AND COMPLETE RELEASE OR WITHDRAWAL OF SUCH MATTERS NOTWITHSTANDING THE DISCOVERY OR EXISTENCE OF ANY SUCH ADDITIONAL OR DIFFERENT CLAIMS OR FACTS RELATED THERETO.

(d) THE RELEASING PARTIES COVENANT AND AGREE NOT TO BRING ANY CLAIM, ACTION, SUIT, OR PROCEEDING AGAINST THE RELEASED PARTIES, DIRECTLY OR INDIRECTLY, REGARDING OR RELATED IN ANY MANNER TO THE MATTERS RELEASED HEREBY, AND FURTHER COVENANT AND AGREE THAT THIS AGREEMENT IS A BAR TO ANY SUCH CLAIM, ACTION, SUIT, OR PROCEEDING.

(e) THE RELEASING PARTIES REPRESENT AND WARRANT TO THE RELEASED PARTIES THAT THEY HAVE NOT HERETOFORE ASSIGNED OR TRANSFERRED, OR PURPORTED TO ASSIGN OR TRANSFER, TO ANY PERSON OR ENTITY ANY CLAIMS OR OTHER MATTERS HEREIN RELEASED.

11. **Counterparts; Governing Law.** This Amendment may be executed in any number of counterparts and by different parties hereto on separate counterparts, each of such when so executed and delivered shall be an original, but all of such counterparts shall together constitute but one and the same agreement. Delivery of an executed counterpart of a signature page of this Amendment by fax transmission or other electronic mail transmission (e.g., “pdf” or “tif”) shall be effective as delivery of a manually executed counterpart of this Amendment. THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF NEW YORK (INCLUDING FOR SUCH PURPOSE SECTIONS 5-1401 AND 5-1402 OF THE GENERAL OBLIGATIONS LAW OF THE STATE OF NEW YORK).

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**IN WITNESS WHEREOF**, the parties hereto have caused this Amendment to be executed by their respective officers thereunto duly authorized as of the day and year first above written.

**BACTERIN INTERNATIONAL, INC.,**  
as the Borrower

By: /s/ Carl D. O'Connell  
Name: Carl D. O'Connell  
Title: Chief Executive Officer

**XTANT MEDICAL HOLDINGS, INC.,**  
(fka: Bacterin International Holdings, Inc.)  
as a Guarantor

By: /s/ Carl D. O'Connell  
Name: Carl D. O'Connell  
Title: Chief Executive Officer

**X-SPINE SYSTEMS, INC.,**  
as a Guarantor and the Additional Delayed Draw Borrower

By: /s/ Carl D. O'Connell  
Name: Carl D. O'Connell  
Title: Chief Executive Officer

**XTANT MEDICAL, INC.,**  
as a Guarantor

By: /s/ Carl D. O'Connell  
Name: Carl D. O'Connell  
Title: Chief Executive Officer

*Signature Page to Twenty-First Amendment to A&R Credit Agreement*

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**ROS ACQUISITION OFFSHORE LP,**  
as a Lender and as the Administrative Agent

By OrbiMed Advisors LLC, solely in its  
capacity as Investment Manager

By:           /s/ W. Carter Neild            
Name: W. Carter Neild  
Title: Member

**ORBIMED ROYALTY OPPORTUNITIES II, LP,**  
as a Lender

By OrbiMed ROF II LLC,  
its General Partner  
By OrbiMed Advisors LLC,  
its Managing Member

By:           /s/ W. Carter Neild            
Name: W. Carter Neild  
Title: Member

*Signature Page to Twenty-First Amendment to A&R Credit Agreement*

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**XTANT MEDICAL HOLDINGS, INC.**

(formerly known as Bacterin International Holdings, Inc.)

**6.00% CONVERTIBLE SENIOR NOTES DUE 2021**

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**AMENDMENT NUMBER 5 TO INDENTURE**

**Dated as of December 29, 2017**

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**WILMINGTON TRUST, NATIONAL ASSOCIATION**  
as Trustee

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THIS AMENDMENT NUMBER 5 TO INDENTURE (this “**Amendment**”), dated as of December 29, 2017, is between Xtant Medical Holdings, Inc., a Delaware corporation formerly known as Bacterin International Holdings, Inc. (the “**Company**”), and Wilmington Trust, National Association, a national banking association, as trustee (the “**Trustee**”).

#### RECITALS

WHEREAS, the Company and the Trustee entered into an Indenture, dated as of July 31, 2015, and as amended by Amendment Number 1 to Indenture, dated as of August 16, 2017, Amendment Number 2 to Indenture, dated as of October 2, 2017, Amendment Number 3 to Indenture, dated as of October 31, 2017, and Amendment Number 4 and Waiver to Indenture, dated as of December 1, 2017 (the “**Indenture**”), pursuant to which \$68,000,000 in principal amount of 6.00% Senior Notes due 2021 (the “**Notes**”), have been issued;

WHEREAS, Section 9.02 of the Indenture provides that the Company, upon the written consent of each affected Holder and when authorized by a Board Resolution, may amend Section 2.04(a)(ii) of the Indenture;

WHEREAS, all acts and things prescribed by the Indenture, by law and by the Certificate of Incorporation and the Bylaws of the Company and of the Trustee necessary to make this Amendment a valid instrument legally binding on the Company and the Trustee, in accordance with its terms, have been duly done and performed;

WHEREAS, there is currently outstanding under the Indenture \$68,000,000 aggregate principal amount of the Notes, and the Holders of 100% of the Notes have previously provided written consent to this Amendment;

WHEREAS, the Company has provided to the Trustee the Officer’s Certificate and Opinion of Counsel required by Section 9.09 of the Indenture with respect to the execution of this Amendment;

WHEREAS, the Company desires to execute this Amendment embodying the modifications of the Indenture approved as aforesaid and has requested that the Trustee execute this Amendment pursuant to clauses (b) and (f) of Section 9.02 of the Indenture; and

WHEREAS, all capitalized terms used but not defined herein shall have the meanings given to them in the Indenture.

NOW, THEREFORE, to comply with the provisions of the Indenture and in consideration of the above premises, the Company and the Trustee covenant and agree for the equal and proportionate benefit of the respective Holders of the Notes as follows:

#### ARTICLE 1.

Section 1.01 This Amendment amends the Indenture and does and shall be deemed to form a part of, and shall be construed in connection with and as part of, the Indenture for any and all purposes.

Section 1.02 This Amendment shall become effective immediately upon its execution and delivery by the Company and the Trustee.

ARTICLE 2.

Section 2.01 Amendment of Section 2.04(a)(ii). Section 2.04(a)(ii) of the Indenture is hereby amended by deleting the last sentence from such Section 2.04(a)(ii) (which sentence, for the avoidance of doubt, was previously added by Amendment Number 4 and Waiver to Indenture) in its entirety and inserting the following thereof:

Notwithstanding anything to the contrary in this Indenture, (A) interest accrued on the Notes otherwise required to be paid in cash on July 15, 2017 (the second semi-annual Interest Payment Date in 2017) shall instead be required to be paid in cash on January 31, 2018, plus interest accrued on such interest from July 15, 2017 to the date of payment thereof at a rate equal to 6.00% per annum plus 100 basis points, (B) the record date for the payment of such amount shall be June 30, 2017 and (C) no Event of Default shall occur (and be waived for all purposes under the Indenture) as a result of the non-payment of such interest on July 15, 2017. Further, notwithstanding anything to the contrary in this Indenture, (A) interest accrued on the Notes otherwise required to be paid in cash on January 15, 2018 (the first semi-annual Interest Payment Date in 2018) shall instead be required to be paid in cash on January 31, 2018, plus interest accrued on such interest from January 15, 2018 to the date of payment thereof at a rate equal to 6.00% per annum plus 100 basis points, (B) the record date for the payment of such amount shall be December 31, 2017 and (C) no Event of Default shall occur (and be waived for all purposes under the Indenture) as a result of the non-payment of such interest on January 15, 2018.

ARTICLE 3.

Section 3.01 Except as specifically modified herein, the Indenture and the Notes are in all respects ratified and confirmed (mutatis mutandis) and shall remain in full force and effect in accordance with their terms with all capitalized terms used herein without definition having the same respective meanings ascribed to them as in the Indenture.

Section 3.02 No duties, responsibilities or liabilities are assumed, or shall be construed to be assumed, by the Trustee by reason of this Amendment. This Amendment is executed and accepted by the Trustee subject to all the terms and conditions set forth in the Indenture with the same force and effect as if those terms and conditions were repeated at length herein and made applicable to the Trustee with respect hereto. The Trustee is not responsible in any manner whatsoever for or in respect of the validity or sufficiency of this Amendment or for or in respect of the recitals contained herein.

Section 3.03 **THIS AMENDMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.**



Section 3.04 The parties may sign any number of copies of this Amendment. Each signed copy shall be an original, but all of such executed copies together shall represent the same agreement.

*[Remainder of Page Intentionally Left Blank; Signature Page Follows]*

IN WITNESS WHEREOF, the undersigned have executed this Amendment as of the day and year first written above.

**XTANT MEDICAL HOLDINGS, INC.,**  
formerly known as Bacterin International Holdings, Inc.

By: /s/ Carl D. O'Connell  
Name: Carl D. O'Connell  
Title: Chief Executive Officer

**WILMINGTON TRUST, NATIONAL ASSOCIATION,**  
as Trustee

By: /s/ Lynn M. Steiner  
Name: Lynn M. Steiner  
Title: Vice President

[Signature Page to Amendment Number 5 to Indenture]

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**FIFTH AMENDMENT AND WAIVER**

This **FIFTH AMENDMENT AND WAIVER** (this "Amendment and Waiver") is made and entered into as of December 28, 2017 by **XTANT MEDICAL HOLDINGS, INC.**, a Delaware corporation (the "Company"), **ROS ACQUISITION OFFSHORE LP**, a Cayman Islands Exempted Limited Partnership ("ROS") and **ORBIMED ROYALTY OPPORTUNITIES II, LP**, a Delaware limited partnership ("Royalty Opportunities" and, together with ROS, collectively, the "Holders").

**WHEREAS**, ROS is the registered holder of a Convertible Promissory Note in the aggregate principal amount of \$1,428,552.78 issued on April 14, 2016 and Convertible Promissory Notes in the aggregate principal amounts of \$995,700 and \$42,856.59 issued on January 17, 2017 (collectively, the "ROS Notes"), in each case, by the Company;

**WHEREAS**, Royalty Opportunities is the registered holder of a Convertible Promissory Note in the aggregate principal amount of \$809,613.67 issued on April 14, 2016 and Convertible Promissory Notes in the aggregate principal amounts of \$564,300 and \$24,288.41 issued on January 17, 2017, in each case, by the Company (collectively, the "Royalty Opportunities Notes" and together with the ROS Notes, collectively, the "Notes");

**WHEREAS**, the Company and the Holders are party to that certain Amendment and Waiver, dated as of August 15, 2017, that certain Second Amendment and Waiver, dated as of September 29, 2017, that certain Third Amendment and Waiver, dated as of October 31, 2017, and that certain Fourth Amendment and Waiver, dated as of November 30, 2017, pursuant to which interest accrued on the Notes was deferred until December 31, 2017 and the Holders waived any Event of Default that occurred as a result of the Company's failure to pay interest due on July 15, 2017; and

**WHEREAS**, pursuant to Section 10.13 of the Notes, the terms and conditions of the Notes may be amended or waived by the written consent of each affected holder of the Notes.

**NOW, THEREFORE**, in consideration of the mutual agreements herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. **Definitions.** Capitalized terms used herein without definition shall have the meanings assigned to such terms in the Notes.
2. **Interest Deferral.**

(a) Interest accrued on the Notes otherwise required to be paid in cash on July 15, 2017 shall instead be required to be paid in cash on January 31, 2018, plus interest accrued on such interest from July 15, 2017 to the date of payment thereof at a rate equal to 6.00% per annum plus 100 basis points.

(b) Interest accrued on the Notes otherwise required to be paid in cash on January 15, 2018 shall instead be required to be paid in cash on January 31, 2018, plus interest accrued on such interest from January 15, 2017 to the date of payment thereof at a rate equal to 6.00% per annum plus 100 basis points.

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3. **Waiver.** Each Holder hereby waives any Event of Default that has occurred under the Notes as a result of the Company's failure to pay interest accrued on the Notes on July 15, 2017 or January 15, 2018.

4. **No Implied Waiver.** Except as expressly set forth in this Amendment and Waiver, this Amendment and Waiver shall not, by implication or otherwise, limit, impair, constitute a waiver of or otherwise affect any rights or remedies of the Holders under the Notes or alter, modify, amend or in any way affect any of the terms, obligations or covenants contained in the Notes, all of which shall continue in full force and effect. Nothing in this Amendment and Waiver shall be construed to imply any willingness on the part of the Holders to agree to or grant any similar or future consent or waiver of any of the terms and conditions of the Notes.

5. **Governing Law.** THIS AMENDMENT AND WAIVER SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE INTERNAL LAWS OF THE STATE OF NEW YORK (INCLUDING FOR SUCH PURPOSE SECTIONS 5-1401 AND 5-1402 OF THE GENERAL OBLIGATIONS LAW OF THE STATE OF NEW YORK).

*[Signature Pages Follow]*

IN WITNESS WHEREOF, the parties hereto have caused this Amendment and Waiver to be executed as of the day and year first above written.

**XTANT MEDICAL HOLDINGS, INC.,**

By: /s/ Carl D. O'Connell  
Name: Carl D. O'Connell  
Title: Chief Executive Officer

*Signature Page to Fifth Amendment and Waiver*

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**ROS ACQUISITION OFFSHORE LP,**

By OrbiMed Advisors LLC, solely in its  
capacity as Investment Manager

By: /s/ W. Carter Neild

Name: W. Carter Neild

Title: Member

**ORBIMED ROYALTY OPPORTUNITIES II, LP,**

By OrbiMed ROF II LLC,  
its General Partner

By OrbiMed Advisors LLC,  
its Managing Member

By: /s/ W. Carter Neild

Name: W. Carter Neild

Title: Member

*Signature Page to Fifth Amendment and Waiver*

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