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

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 8)*

XTANT MEDICAL HOLDINGS, INC.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

98420P308

(CUSIP Number)

OrbiMed Advisors LLC OrbiMed ROF II LLC

601 Lexington Avenue, 54th Floor New York, NY 10022 Telephone: (212) 739-6400

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

April 6, 2021

(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of § 240.13d-1(e), 240.13d-1(g), check the following box \boxtimes .

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See § 240.13d-7(b) for other parties to whom copies are to be sent.

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("<u>Act</u>") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No	o. 98420P308				
1	NAME OF REPORTING PERSONS OrbiMed Advisors LLC				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) o (b) o				
3	SEC USE ONLY				
4	SOURCE OF FUNDS (See Instructions) AF				
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) o				
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware				
	UMBER OF SHARES	7	SOLE VOTING POWER		
	NEFICIALLY WNED BY	8	SHARED VOTING POWER 72,873,494 (1)		
RI	EACH EPORTING	9	SOLE DISPOSITIVE POWER		
	PERSON WITH:	10	SHARED DISPOSITIVE POWER 72,873,494		
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 72,873,494				
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES o (See Instructions)				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 84.0%*				
14	TYPE OF REPORTING PERSON (See Instructions) IA				

* This percentage is calculated based upon 86,707,286 Shares outstanding of Xtant Medical Holdings, Inc., a Delaware corporation (the "<u>Issuer</u>"), as set forth in the Issuer's Registration Statement on Form S-3, filed with the Securities and Exchange Commission on April 6, 2021.

CUSIP No	. 98420P308					
1	NAME OF REPORTING PERSONS OrbiMed ROF II LLC					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (See Instructions) (a) o (b) o					
3	SEC USE ONLY					
4	SOURCE OF FUNDS (See Instructions) AF					
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) o					
6	CITIZENSHIP OR PLACE OF ORGANIZATION Delaware					
	JMBER OF SHARES	7	SOLE VOTING POWER			
	NEFICIALLY WNED BY	8	SHARED VOTING POWER 17,053,198 (1)			
RI	EACH EPORTING	9	SOLE DISPOSITIVE POWER 0			
	PERSON WITH:	10	SHARED DISPOSITIVE POWER 17,053,198 (1)			
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 17,053,198 (1)					
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES o (See Instructions)					
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 19.7% (2)					
14	TYPE OF REPORTING PERSON (See Instructions) IA					

* This percentage is calculated based upon 86,707,286 Shares outstanding of Xtant Medical Holdings, Inc., a Delaware corporation (the "<u>Issuer</u>"), as set forth in the Issuer's Registration Statement on Form S-3, filed with the Securities and Exchange Commission on April 6, 2021.

-2-

Item 1. Security and Issuer

This Amendment No. 8 ("<u>Amendment No. 8</u>") to Schedule 13D supplements and amends the Statement on Schedule 13D of OrbiMed Advisors LLC originally filed with the Securities and Exchange Commission (the "<u>SEC</u>") on May 30, 2017 (the "<u>Statement</u>") with Samuel D. Isaly as an additional reporting person, and amended by Amendment No. 1 thereto filed with the SEC on January 17, 2018, Amendment No. 2 thereto filed with the SEC on September 19, 2018, Amendment No. 4 thereto filed with the SEC on April 4, 2019, Amendment No. 5 thereto filed with the SEC on May 20, 2020, Amendment No. 6 thereto filed with the SEC on October 5, 2020, and Amendment No. 7 thereto filed with the SEC on February 26, 2021 ("<u>Amendment No. 7</u>"). The Statement relates to the common stock, par value \$0.000001 per share (the "<u>Shares</u>"), of Xtant Medical Holdings, Inc. (formerly Bacterin International Holdings, Inc.), a Delaware corporation (the "<u>Issuer</u>"), with its principal offices located at 664 Cruiser Lane, Belgrade, Montana 59714. The Shares are listed on the NYSE American LLC (formerly the NYSE MKT) under the ticker symbol "XTNT".

This Amendment No. 8 is being filed to report that on April 6, 2021, the Issuer filed a registration statement on Form S-3 with the SEC that reported its total number of outstanding Shares had increased to 86,707,286 (the "<u>Outstanding Share Increase</u>"). As a result of the Outstanding Share Increase, the percentage of outstanding Shares that the Reporting Persons may be deemed to beneficially own was reduced by more than 1% since the filing of Amendment No. 7.

Item 2. Identity and Background

(a) This Statement is being filed by OrbiMed Advisors LLC ("<u>Advisors</u>") and OrbiMed ROF II LLC ("<u>OrbiMed ROF</u>") (collectively, the "<u>Reporting Persons</u>").

(b) - (c), (f) Advisors, a limited liability company organized under the laws of Delaware and a registered investment adviser under the Investment Advisers Act of 1940, as amended, is the managing member or investment manager of certain entities as more particularly described in Item 6 below. Advisors has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

OrbiMed ROF, a limited liability company organized under the laws of Delaware, is the general partner of OrbiMed Royalty Opportunities II, LP ("ORO II") as more particularly described in Item 6 below. OrbiMed ROF has its principal offices at 601 Lexington Avenue, 54th Floor, New York, New York 10022.

The directors and executive officers of Advisors and OrbiMed ROF are set forth on Schedules I and II, attached hereto. Schedules I and II set forth the following information with respect to each such person:

- (i) name;
- (ii) business address;

(iii) present principal occupation or employment and the name, principal business and address of any corporation or other organization in which such employment is conducted; and

(iv) citizenship.

(d) - (e) During the last five years, neither the Reporting Persons nor any person named in Schedule I or Schedule II have been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

-3-

Item 3. Source and Amount of Funds or Other Consideration

Not Applicable.

Item 4. Purpose of Transaction

Advisors caused ROS Acquisition Offshore LP ("ROS Acquisition"), and Advisors and OrbiMed ROF caused ORO II, to acquire Shares and other securities of the Issuer for the purpose of making an investment in the Issuer and not with the intention of acquiring control of the Issuer's business on behalf of ROS Acquisition and ORO II.

The Reporting Persons from time to time intend to review their investment in the Issuer on the basis of various factors, including the Issuer's business, financial condition, results of operations and prospects, general economic and industry conditions, the securities markets in general and those for the Issuer's Shares in particular, as well as other developments and other investment opportunities. Based upon such review, the Reporting Persons will take such actions in the future as the Reporting Persons may deem appropriate in light of the circumstances existing from time to time. If the Reporting Persons believe that further investment in the Issuer is attractive, whether because of the market price of Shares or otherwise, they may acquire Shares or other securities of the Issuer either in the open market or in privately negotiated transactions. Similarly, depending on market and other factors, the Reporting Persons may determine to dispose of some or all of the Shares currently owned by the Reporting Persons or otherwise acquired by the Reporting Persons either in the open market or in privately negotiated transactions.

Except as set forth in this Statement, the Reporting Persons have not formulated any plans or proposals which relate to or would result in: (a) the acquisition by any person of additional securities of the Issuer or the disposition of securities of the Issuer; (b) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries; (c) a sale or transfer of a material amount of the assets of the Issuer or any of its subsidiaries; (d) any change in the present board of directors (the "<u>Board</u>") or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the Board; (e) any material change in the Issuer's capitalization or dividend policy of the Issuer; (f) any other material change in the Issuer's business or corporate structure; (g) any change in the Issuer's charter or bylaws or other instrument corresponding thereto or other action which may impede the acquisition of control of the Issuer by any person; (h) causing a class of the Issuer's securities to be deregistered or delisted from a national securities exchange or to cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association; (i) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Act; or (j) any action similar to any of those enumerated above.

Item 5. Interest in Securities of the Issuer

(a)-(b) As of the date of this filing, ROS Acquisition, a Cayman Islands exempted limited partnership, holds 55,820,296 Shares, constituting approximately 64.4% of the issued and outstanding Shares. Advisors, pursuant to its authority as the investment manager of ROS Acquisition, has the power to direct the vote and to direct the disposition of the Shares held by ROS Acquisition. As a result, Advisors may be deemed to indirectly beneficially own the Shares held by ROS Acquisition. Advisors exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and Jonathan T. Silverstein, each of whom disclaims beneficial ownership of the Shares held by ROS Acquisition.

In addition, Advisors, pursuant to its authority as investment manager of ROS Acquisition, caused ROS Acquisition to enter into the agreements referred to in Item 6 below.

As of the date of this filing, ORO II, a limited partnership organized under the laws of Delaware, holds 17,053,198 Shares, constituting approximately 19.7% of the issued and outstanding Shares. OrbiMed ROF is the general partner of ORO II, pursuant to the terms of the limited partnership agreement of ORO II, and Advisors is the managing member of OrbiMed ROF, pursuant to the terms of the limited liability company agreement of OrbiMed ROF. As a result, Advisors and OrbiMed ROF share power to direct the vote and disposition of the Shares held by ORO II and may be deemed directly or indirectly, including by reason of their mutual affiliation, to be the beneficial owners of the Shares held by ORO II. Advisors exercises this investment and voting power through a management committee comprised of Carl L. Gordon, Sven H. Borho, and Jonathan T. Silverstein, each of whom disclaims beneficial ownership of the Shares held by ORO II.

-4-

In addition, Advisors, pursuant to its authority under the limited liability company agreement of OrbiMed ROF, and OrbiMed ROF, pursuant to its authority under the limited partnership agreement of ORO II, caused ORO II to enter into the agreements referred to in Item 6 below.

- (c) The Reporting Persons have not effected any transactions in the Shares during the past sixty (60) days.
- (d) Not applicable.
- (e) Not applicable.

Item 6. Contracts, Arrangements, Understandings or Relationship with Respect to Securities of the Issuer

OrbiMed ROF is the general partner of ORO II, pursuant to the terms of the limited partnership agreement of ORO II. Pursuant to this agreement and relationship, OrbiMed ROF has discretionary investment management authority with respect to the assets of ORO II. Such authority includes the power to vote and otherwise dispose of securities held by ORO II. The number of outstanding Shares of the Issuer attributable to ORO II is 17,053,198. OrbiMed ROF, pursuant to its authority under the limited partnership agreement of ORO II, may be considered to hold indirectly 17,053,198 Shares.

Advisors is the managing member of OrbiMed ROF pursuant to the terms of the limited liability company agreement of OrbiMed ROF and is the investment manager of ROS Acquisition. Pursuant to these relationships, Advisors has discretionary investment management authority with respect to the assets of ROS Acquisition and, together with OrbiMed ROF, ORO II. Such authority includes the power of Advisors to vote and otherwise dispose of securities held by ROS Acquisition and ORO II. The aggregate number of fully diluted Shares held by ROS Acquisition is 55,820,296 and the aggregate number of fully diluted shares owned by ORO II is 17,053,198. Advisors may be considered to hold indirectly 72,873,494 Shares.

Matthew Rizzo ("<u>Rizzo</u>") and Michael Eggenberg ("<u>Eggenberg</u>"), both of whom are employees of Advisors, are members of the Board, and, accordingly, the Reporting Persons may have the ability to affect and influence control of the Issuer. From time to time, Rizzo and/or Eggenberg may receive stock options or other awards of equity-based compensation pursuant to the Issuer's compensation arrangements for non-employee directors. Rizzo and Eggenberg are obligated to transfer any securities issued under any such stock options or other awards, or the economic benefit thereof, to the Reporting Persons, which will in turn ensure that such securities or economic benefit are provided to ROS Acquisition and ORO II.

Registration Rights Agreement

On October 1, 2020, the Issuer entered into a Registration Rights Agreement (the "<u>Registration Rights Agreement</u>") with ROS Acquisition and ORO II. Upon demand, the Registration Rights Agreement requires the Issuer to, among other things, file with the SEC a shelf registration statement (which, initially, will be on Form S-1 and, as soon as the Issuer is eligible, will be on Form S-3) covering the resale, from time to time, of the Shares issued to ROS Acquisition and ORO II pursuant to the transactions described in the Restructuring Agreement, dated as of August 7, 2020 and in respect of prepayment fees under the amendment to the Second A&R Credit Agreement within 90 days of such demand and to use its best efforts to cause the shelf registration statement to become effective under the Securities Act no later than the 180th day after such demand.

Investor Rights Agreement

The Issuer is party to an Investor Rights Agreement (the "<u>Investor Rights Agreement</u>") with ROS Acquisition and ORO II and certain other investors. Under the Investor Rights Agreement, ROS Acquisition and ORO II are permitted to nominate a majority of the directors and designate the chairperson of the Board at subsequent annual meetings, as long as they maintain an ownership threshold in the Issuer of at least 40% of the then outstanding Shares (the "<u>Ownership Threshold</u>"). If ROS Acquisition and ORO II are unable to maintain the Ownership Threshold, the Investor Rights Agreement contemplates a reduction of nomination rights commensurate with the Issuer ownership interests. At the request of the Reporting Person, the Issuer nominated Rizzo and Eggenberg, both of whom are employees of Advisors. The Issuer's stockholders elected both Rizzo and Eggenberg to the Board.

For so long as the Ownership Threshold is met, the Issuer must obtain the approval of a majority of the Shares held by ROS Acquisition and ORO II to proceed with the following actions: (i) issue new securities; (ii) incur over \$250,000 of debt in a fiscal year; (iii) sell or transfer over \$250,000 of assets or businesses of the Issuer or its subsidiaries in a fiscal year; (iv) acquire over \$250,000 of assets or properties in a fiscal year; (v) make capital expenditures over \$125,000 individually, or \$1.5 million in the aggregate during a fiscal year; (vi) approve the Issuer's annual budget; (vii) hire or terminate the Issuer's chief executive officer; (viii) appoint or remove the chairperson of the Board; and (ix) make loans to, investments in, or purchase, or permit any subsidiary to purchase, any stock or other securities in another entity in excess of \$250,000 in a fiscal year. As long as the Ownership Threshold is met, the Issuer may not increase the size of the Board beyond seven directors without the approval of a majority of the directors nominated by ROS Acquisition and ORO II.

The Investor Rights Agreement grants ROS Acquisition and ORO II the right to purchase from the Issuer a pro rata amount of any new securities that the Issuer may propose to issue and sell. The Investor Rights Agreement may be terminated (a) upon the mutual written agreement of all the parties, (b) upon written notice of any party if ROS Acquisition and ORO II's ownership percentage of the Shares is less than 10%, or (c) upon written notice of ROS Acquisition and ORO II.

Credit Agreement Amendment

On October 1, 2020, the Issuer entered into a Second Amendment to the Second A&R Credit Agreement with the ROS Acquisition and ORO II, which amended the Second A&R Credit Agreement as follows: (i) extinguished loans in an aggregate principal amount equal to the Exchanging Loans outstanding thereunder on the Closing Date, immediately prior to the Closing, together with all accrued and unpaid interest thereon; (ii) added loans in an aggregate principal amount equal to a portion of the prepayment fee payable under the Second A&R Credit Agreement in respect of the Exchanging Loans and exchanged the remaining portion of the prepayment fee for an additional 0.9 million shares of Common Stock; (iii) removed the availability of the Additional Delayed Draw Loans and reduced the Additional Second Delayed Draw Commitment Amount (as such terms are defined in the Second A&R Credit Agreement) to \$5.0 million; (iv) provided that beginning on October 1, 2020 through the maturity date of the Second A&R Credit Agreement, interest payable in cash will accrue on the loans thereunder at a rate per annum equal to the sum of (i) 7.00% plus (ii) the higher of (x) the LIBO Rate (as such term is defined in the Second A&R Credit Agreement) and (y) 1.00%; and (v) eliminated the Revenue Base (as such term is defined in the Second A&R Credit Agreement) financial covenant.

Lock-Up Agreement

Pursuant to a Lock-Up agreement (the "Lock-Up Agreement"), ROS Acquisition and ORO II agreed that they will not, during the period ending 90 days after February 24, 2021, which was the closing date of the transactions contemplated by that certain Securities Purchase Agreement, dated as of February 22, 2021, between the Issuer and the purchaser signatory thereto (the "Lock-Up Period"), directly or indirectly (1) sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, any Shares or securities convertible into or exercisable or exchangeable for Shares with respect to which ROS Acquisition and ORO II have or acquire the power of disposition or (2) enter into any swap or other agreement that transfers, in whole or in part, the economic risk of ownership of any such Shares.

After the Lock-Up Period expires, ROS Acquisition's and ORO II's Shares will be eligible for sale in the public market, subject to any applicable limitations under Rule 144 under the Securities Act, and other applicable U.S. securities laws.

-6-

The foregoing descriptions of the Registration Rights Agreement, the Investor Rights Agreement, the Second Amendment to the Second A&R Credit Agreement, and the Lock-Up Agreement do not purport to be complete and are qualified in their entirety by reference to such documents that are attached as exhibits hereto and are incorporated by reference herein. Other than as described in this Statement, to the best of the Reporting Persons' knowledge, there are no other contracts, arrangements, understandings or relationships (legal or otherwise) among the persons named in Item 2 and between such persons and any person with respect to any securities of the Issuer.

Item 7. Materials to Be Filed as Exhibits

Exhibit	Description			
1.	Joint Filing Agreement among OrbiMed Advisors LLC and OrbiMed ROF II LLC.			
2.	Form of Investor Rights Agreement among Xtant Medical Holdings, Inc., ROS Acquisition Offshore LP, OrbiMed Royalty			
	Opportunities II, LP, Park West Partners International and Limited, Park West Investors Master Fund, Limited (incorporated by			
	reference to Exhibit D to Exhibit 10.1 to the Form 8-K filed with the SEC by Xtant Medical Holdings, Inc. on January 12, 2018).			
3.	Second Amended and Restated Credit Agreement, effective as of March 29, 2019, by and among Xtant Medical Holdings, Inc.,			
	Bacterin International, Inc., Xtant Medical, Inc., X-Spine Systems, Inc., OrbiMed Royalty Opportunities II, LP and ROS Acquisition			
	Offshore LP (incorporated by reference to Exhibit 10.47 to the Form 10-K filed with the SEC by Xtant Medical Holdings, Inc. on			
	April 1, 2019).			
4.	First Amendment to the Second Amended and Restated Credit Agreement, effective as of April 1, 2020, by and among Xtant Medical			
	Holdings, Inc., Bacterin International, Inc., Xtant Medical, Inc., X-Spine Systems, Inc., OrbiMed Royalty Opportunities II, LP and			
	ROS Acquisition Offshore LP (incorporated by reference to Exhibit 10.1 to the Form 10-Q filed with the SEC by Xtant Medical			
	Holdings, Inc. on May 7, 2020).			
5.	Registration Rights Agreement (incorporated by reference to Exhibit 10.1 to the Form 8-K filed with the SEC by Xtant Medical			
	Holdings, Inc. on October 1, 2020).			
6.	Second Amendment to the Second Amended and Restated Credit Agreement, effective as of October 1, 2020, by and among Xtant			
	Medical Holdings, Inc., Bacterin International, Inc., Xtant Medical, Inc., X-Spine Systems, Inc., OrbiMed Royalty Opportunities II,			
	LP and ROS Acquisition Offshore LP (incorporated by reference to Exhibit 10.1 to the Form 8-K filed with the SEC by Xtant			
	Medical Holdings, Inc. on October 1, 2020).			
7.	Form of Lock-Up Agreement			

SIGNATURE

After reasonable inquiry and to the best of each of the undersigned's knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: April 9, 2021

OrbiMed Advisors LLC

By: /s/ Jonathan T. Silverstein

Name: Jonathan T. Silverstein Title: Member

OrbiMed ROF II LLC

- By: OrbiMed Advisors LLC its Managing Member
- By: /s/ Jonathan T. Silverstein Name: Jonathan T. Silverstein Title: Member of OrbiMed Advisors LLC

-8-

Schedule I

The name and present principal occupation of each of the executive officers and directors of OrbiMed Advisors LLC are set forth below. Unless otherwise noted, each of these persons are United States citizens and have as their business address 601 Lexington Avenue, 54th Floor, New York, NY 10022.

	Position with Reporting	
Name	Person	Principal Occupation
Carl L. Gordon	Member	Member OrbiMed Advisors LLC
Sven H. Borho German and Swedish Citizen	Member	Member OrbiMed Advisors LLC
Jonathan T. Silverstein	Member	Member OrbiMed Advisors LLC
W. Carter Neild	Member	Member OrbiMed Advisors LLC
Geoffrey C. Hsu	Member	Member OrbiMed Advisors LLC
C. Scotland Stevens	Member	Member OrbiMed Advisors LLC
David P. Bonita	Member	Member OrbiMed Advisors LLC
Trey Block	Chief Financial Officer	Chief Financial Officer OrbiMed Advisors LLC

-9-

Schedule II

The business and operations of OrbiMed ROF II LLC are managed by the executive officers and directors of its managing member, OrbiMed Advisors LLC, set forth on Schedule I.

-10-

EXHIBIT INDEX

Exhibit	Description		
1.	Joint Filing Agreement among OrbiMed Advisors LLC and OrbiMed ROF II LLC.		
2.	Form of Investor Rights Agreement among Xtant Medical Holdings, Inc., ROS Acquisition Offshore LP, OrbiMed Royalty		
	Opportunities II, LP, Park West Partners International and Limited, Park West Investors Master Fund, Limited (incorporated by		
	reference to Exhibit D to Exhibit 10.1 to the Form 8-K filed with the SEC by Xtant Medical Holdings, Inc. on January 12, 2018).		
3.	Second Amended and Restated Credit Agreement, effective as of March 29, 2019, by and among Xtant Medical Holdings, Inc.,		
	Bacterin International, Inc., Xtant Medical, Inc., X-Spine Systems, Inc., OrbiMed Royalty Opportunities II, LP and ROS Acquisition		
	Offshore LP (incorporated by reference to Exhibit 10.47 to the Form 10-K filed with the SEC by Xtant Medical Holdings, Inc. on		
	April 1, 2019).		
4.	First Amendment to the Second Amended and Restated Credit Agreement, effective as of April 1, 2020, by and among Xtant Medical		
	Holdings, Inc., Bacterin International, Inc., Xtant Medical, Inc., X-Spine Systems, Inc., OrbiMed Royalty Opportunities II, LP and		
	ROS Acquisition Offshore LP (incorporated by reference to Exhibit 10.1 to the Form 10-Q filed with the SEC by Xtant Medical		
	Holdings, Inc. on May 7, 2020).		
5.	Registration Rights Agreement (incorporated by reference to Exhibit 10.1 to the Form 8-K filed with the SEC by Xtant Medical		
	Holdings, Inc. on October 1, 2020).		
6.	Second Amendment to the Second Amended and Restated Credit Agreement, effective as of October 1, 2020, by and among Xtant		
	Medical Holdings, Inc., Bacterin International, Inc., Xtant Medical, Inc., X-Spine Systems, Inc., OrbiMed Royalty Opportunities II,		
	LP and ROS Acquisition Offshore LP (incorporated by reference to Exhibit 10.1 to the Form 8-K filed with the SEC by Xtant		
	Medical Holdings, Inc. on October 1, 2020).		
7.	Form of Lock-Up Agreement		

-11-

JOINT FILING AGREEMENT

The undersigned hereby agree that the Statement on this Schedule 13D, dated April 9, 2021 (the "<u>Schedule 13D</u>"), with respect to the Common Stock, of Xtant Medical Holdings, Inc. is filed, and all amendments thereto will be filed, on behalf of each of us pursuant to and in accordance with the provisions of Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, and that this Agreement shall be included as an Exhibit to this Schedule 13D. Each of the undersigned agrees to be responsible for the timely filing of the Schedule 13D, and for the completeness and accuracy of the information concerning itself contained therein. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Agreement as of the 9th day of April, 2021.

OrbiMed Advisors LLC

By: /s/ Jonathan T. Silverstein Name: Jonathan T. Silverstein Title: Member

OrbiMed ROF II LLC

- By: OrbiMed Advisors LLC its Managing Member
- By: /s/ Jonathan T. Silverstein

Name: Jonathan T. Silverstein Title: Member of OrbiMed Advisors LLC

-12-