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): May 21, 2018

XTANT MEDICAL HOLDINGS, INC.

(Exact name of registrant as specified in its charter)

Delaware 001-34951 (State or other jurisdiction of incorporation) (Commission File Number)

20-5313323 (I.R.S. Employer Identification Number)

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:
☐ 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))
ndicate 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 \square
f 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 evised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. □

Item 7.01 Regulation FD Disclosure.

On May 21, 2018, Xtant Medical Holdings, Inc. (the "Company") issued a press release entitled "Xtant Medical Receives FDA 510(k) Clearance for InTiceTM-C Porous Titanium Cervical Interbody System" which is attached as Exhibit 99.1 hereto and incorporated herein by reference.

The Company is furnishing the information contained in this Item 7.01 of this Current Report on Form 8-K and Exhibit 99.1 to this report pursuant to Item 7.01 of Form 8-K promulgated by the Securities and Exchange Commission (the "SEC"). This information shall not be deemed to be "filed" with the SEC for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended ("Exchange Act"), or otherwise subject to the liabilities of that section, nor shall it be deemed to be incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Exchange Act, except as expressly set forth by specific reference in such filing. By filing this report and furnishing this information, the Company makes no admission as to the materiality of any information contained in this Item 7.01 of this report and Exhibit 99.1.

Item 8.01 Other Events.

On May 21, 2018, the Company announced the receipt of U.S. Food and Drug Administration 510(k) clearance for the InTice TM -C Porous Titanium Cervical Interbody System.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.Description99.1Press Release of Xtant Medical Holdings, Inc. dated May 21, 2018, entitled "Xtant Medical Receives FDA 510(k) Clearance for InTice™-C Porous Titanium Cervical Interbody System." (furnished herewith)

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.

XTANT MEDICAL HOLDINGS, INC.

By: /s/ Carl D. O'Connell

Carl D. O'Connell Chief Executive Officer

Dated: May 21, 2018

Xtant Medical Receives FDA 510(k) Clearance for InTice™-C Porous Titanium Cervical Interbody System

BELGRADE, MT., May. 21, 2018 -- Xtant Medical Holdings, Inc. (NYSE American: XTNT), a leader in the development of regenerative medicine products and medical devices, announces U.S. Food and Drug Administration (FDA) 510(k) clearance for InTiceTM-C Porous Titanium Cervical Interbody System.

InTice-C is designed using OsteoSync Ti, a best-in-class, cost-effective, highly porous titanium scaffold material for improved implant fixation. The material more closely resembles the bioscaffold of cancellous bone, and further combines Xtant Medical's hardware and biologic portfolios. In addition to InTice-C serving as a bioactive scaffold, it is also cleared for use with Xtant's proprietary allograft lines, including OsteoSponge[®], 3Demin[®] Cortical Fibers, and OsteoVive™ viable cell allograft.

"InTice-C represents Xtant's latest addition to our spinal implant portfolio and is our first spinal implant to be engineered using a best-in-class porous titanium material" stated Dr. Gregory Juda, Chief Scientific Officer and General Manager of Xtant Medical. "The porous architecture of the titanium was designed to improve implant fixation, both prior and post fusion. We expect a positive reception of this technology from our surgeon customers in the cervical spine market."

The InTice-C Is designed to provide cervical intervertebral body fusion options for each patient's varied anatomy. It is offered in multiple footprint, height and endplate options. The commercial pure titanium structure offers continuous pore interconnectivity from the top to the bottom as well as from the outer perimeter to the large central graft cavity of the implant. This optimizes vascularization to the fusion site allowing the implant to be a participant in the fusion process. The implant utilizes machined endplate structures in conjunction with the inherent texture of the porous titanium to provide migration resistance. The implant is offered in individual sterile packages. InTice-C was developed in collaboration with Sites Medical.

InTice-C will help the Company further penetrate the \$285 million dollar cervical spine market. Xtant's other cervical interbody options include Calix[®]-C, Calix-C PC, Atrix-C[®], and Irix[®]-C, which offer PEEK, PEEK with a plasma-coated titanium, a structural biologic solution, and a standalone cervical option, respectively.

About Xtant Medical

Xtant Medical develops, manufactures and markets regenerative medicine products and medical devices for domestic and international markets. Xtant Medical products serve the 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, and biologics to promote healing following cranial, and foot and ankle surgeries. With core competencies in both biologic and non-biologic surgical technologies, Xtant Medical can leverage its resources to successfully compete in global neurological and orthopedic surgery markets. For further information, please visit www.xtantmedical.com.

Important Cautions Regarding Forward-looking Statements

This press release contains certain disclosures that may be deemed forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 that are subject to significant risks and uncertainties. Forward-looking statements include statements that are predictive in nature, that depend upon or refer to future events or conditions, or that include words such as "continue," "efforts," "expects," "anticipates," "intends," "plans," "believes," "estimates," "projects," "forecasts," "strategy," "will," "goal," "target," "prospects," "potential," "optimistic," "confident," "likely," "probable" or similar expressions or the negative thereof. Statements of historical fact also may be deemed to be forward-looking statements. We caution that these statements by their nature involve risks and uncertainties, and actual results may differ materially depending on a variety of important factors, including, among others: the ability to increase revenue; the ability to achieve expected results; the ability to remain competitive; the ability to innovate and develop new products; the ability to engage and retain qualified technical personnel and members of the Company's management team; influence by Company management; the security of our technology systems; government and third-party coverage and reimbursement for Company products; the ability to obtain donors to support the biologic portfolio; the availability of Company facilities; the ability to remain accredited with the American Association of Tissue Banks; the ability to obtain regulatory approvals; government regulations; product liability claims and other litigation to which we may be subjected; product recalls and defects; timing and results of clinical studies; the ability to obtain and protect Company intellectual property and proprietary rights; infringement and ownership of intellectual property; the ability to use net operating loss carry-forwards to offset future taxable income; the ability to service Company debt; the ability to comply with covenants in the Company's senior credit facility; the ability to raise additional financing and other factors. Additional risk factors are listed in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 filed with the Securities and Exchange Commission (SEC) on April 2, 2018 and subsequent SEC filings by the Company, including without limitation its Quarterly Report on Form 10-Q for the quarter ended March 31, 2018. Investors are encouraged to read the Company's filings with the SEC, available at www.sec.gov, for a discussion of these and other risks and uncertainties. Investors should not place considerable reliance on the forward-looking statements contained in this release. The Company undertakes no obligation to release publicly any revisions to any forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events, except as required by law. The Company's business is subject to substantial risks and uncertainties, including those referenced above. Investors, potential investors, and others should give careful consideration to these risks and uncertainties. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by this cautionary statement.

Investor Contact

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Company Contact

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Xtant Medical Holdings, Inc.