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

FORM S-8
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

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
(Address of Principal Executive Offices)

59714
(Zip Code)

**Xtant Medical Holdings, Inc. Second Amended and Restated
2018 Equity Incentive Plan**
(Full title of the plan)

Sean E. Browne
President and Chief Executive Officer
Xtant Medical Holdings, Inc.
664 Cruiser Lane
Belgrade, Montana 59714
(Name and address of agent for service)

(406) 388-0480
(Telephone number, including area code, of agent for service)

Copies requested to:
Amy E. Culbert, Esq.
Emily Humbert, Esq.
Fox Rothschild LLP
222 South Ninth Street, Suite 2000
Minneapolis, Minnesota 55402-3338
(612) 607-7000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer
Non-accelerated filer

Accelerated filer
Smaller reporting company
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 7(a)(2)(B) of the Securities Act.

EXPLANATORY NOTE

This Registration Statement on Form S-8 (the “Registration Statement”) of Xtant Medical Holdings, Inc. (the “Company” or the “Registrant”) is being filed pursuant to General Instruction E to Form S-8 under the Securities Act of 1933, as amended (the “Securities Act”), to register an additional 8,500,000 shares of the Company’s common stock, par value \$0.000001 per share (the “Common Stock”), available for issuance under the Xtant Medical Holdings, Inc. Second Amended and Restated 2018 Equity Incentive Plan (such plan and all prior and subsequent versions thereof, the “2018 Plan”). This share increase was approved by the Company’s stockholders at an annual meeting of stockholders held on October 26, 2022. The Company previously filed with the Securities and Exchange Commission (the “SEC”) a Registration Statement on Form S-8 (Reg. No. 333-226588) to register the initial 1,307,747 shares of Common Stock available for issuance under the 2018 Plan, a Registration Statement on Form S-8 (Reg. No. 333-234595) to register an additional 1,500,000 shares of Common Stock available for issuance under the 2018 Plan, and a Registration Statement on Form S-8 (Reg. No. 333-249762) to register an additional 5,550,308 shares of Common Stock available for issuance under the 2018 Plan. The contents of such prior Registration Statements, with the exception of Items 3 and 8 of Part II of such prior Registration Statements, are hereby incorporated by reference.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Company hereby incorporates by reference into this Registration Statement the following documents, which have been previously filed (not furnished) with the SEC:

- (a) The Company's [Annual Report on Form 10-K for the year ended December 31, 2021 filed with the SEC on March 8, 2022](#) (File No. 001-34951);
- (b) The Company's [Quarterly Report on Form 10-Q for the quarter ended March 31, 2022 filed with the SEC on May 5, 2022](#) and the Company's [Quarterly Report on Form 10-Q for the quarter ended June 30, 2022 filed with the SEC on August 4, 2022](#) (File No. 001-34951);
- (c) The Company's Current Reports on Form 8-K (other than portions thereof furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits accompanying such reports that are related to such items) filed with the SEC on [January 3, 2022](#), [May 2, 2022](#), [August 24, 2022](#), [August 31, 2022](#), [October 11, 2022](#) and [October 28, 2022](#) (File No. 001-34951);
- (d) The Company's [Definitive Proxy Statement on Schedule 14A for the Company's 2022 Annual Meeting of Stockholders filed with the SEC on September 20, 2022](#) (File No. 001-34951); and
- (e) The description of the Common Stock contained in the Company's Registration Statement on Form 8-A, filed on [October 15, 2015](#), as amended [March 8, 2022](#), including any amendment or reports filed for the purpose of updating such description (File No. 001-34951).

In addition, all other documents filed (not furnished) by the Company pursuant to Section 13(a), Section 13(c), Section 14, or Section 15(d) of the Securities Exchange Act of 1934, as amended, on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered hereby have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated in this Registration Statement by reference and to be a part of this Registration Statement from the date of filing of such documents; *provided, however*, that documents or information deemed to have been furnished to and not filed with the SEC in accordance with the rules of the SEC shall not be deemed incorporated by reference into this Registration Statement.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any subsequently filed document which also is deemed to be incorporated by reference herein modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 8. Exhibits.

The following exhibits are filed with or incorporated by reference into this Registration Statement:

Exhibit No.	Description
3.1	<u>Amended and Restated Certificate of Incorporation of Xtant Medical Holdings, Inc. (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the SEC on February 13, 2018 (SEC File No. 001-34951) and incorporated by reference herein)</u>
3.2	<u>Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Xtant Medical Holdings, Inc. (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the SEC on October 31, 2019 (SEC File No. 001-34951) and incorporated by reference herein)</u>
3.3	<u>Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Xtant Medical Holdings, Inc. (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the SEC on October 1, 2020 (SEC File No. 001-34951) and incorporated by reference herein)</u>
3.4	<u>Second Amended and Restated Bylaws of Xtant Medical Holdings, Inc. (filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed with the SEC on February 16, 2018 (SEC File No. 001-34951) and incorporated by reference herein)</u>
4.1	<u>Form of Common Stock Certificate of Xtant Medical Holdings, Inc. (filed as Exhibit 4.2 to the Registrant's Annual Report on Form 10-K for the year ended December 31, 2021 (SEC File No. 001-34951) and incorporated by reference herein)</u>
5.1	<u>Opinion of Fox Rothschild LLP regarding the validity of the shares of Common Stock being registered (filed herewith)</u>
23.1	<u>Consent of Plante & Moran, PLLC (filed herewith)</u>
23.2	<u>Consent of Fox Rothschild LLP (included within the opinion filed as Exhibit 5.1)</u>
24.1	<u>Power of Attorney (included on signature page to this Registration Statement)</u>
99.1	<u>Xtant Medical Holdings, Inc. Second Amended and Restated 2018 Equity Incentive Plan (filed as Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed with the SEC on October 28, 2022 (SEC File No. 001-34951) and incorporated by reference herein)</u>
107	<u>Filing Fee Table (filed herewith)</u>

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Belgrade, State of Montana, on October 28, 2022.

XTANT MEDICAL HOLDINGS, INC.

By: */s/ Sean E. Browne*

Sean E. Browne
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Stavros Vizirgianakis, Sean Browne and Scott Neils, and each of them, as his true and lawful attorneys-in-fact and agents, with full power of substitution for him in any and all capacities, to sign (i) any and all amendments (including post-effective amendments) to this Registration Statement and (ii) any registration statement or post-effective amendment thereto to be filed with the Securities and Exchange Commission pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Name and Signature	Title	Date
<i>/s/ Sean E. Browne</i> Sean E. Browne	President and Chief Executive Officer and Director (principal executive officer)	October 28, 2022
<i>/s/ Scott Neils</i> Scott Neils	Chief Financial Officer (principal financial and accounting officer)	October 28, 2022
<i>/s/ Stavros Vizirgianakis</i> Stavros Vizirgianakis	Chairman of the Board	October 28, 2022
<i>/s/ John Bakewell</i> John Bakewell	Director	October 28, 2022
<i>/s/ Michael Eggenberg</i> Michael Eggenberg	Director	October 28, 2022
<i>/s/ Robert McNamara</i> Robert McNamara	Director	October 28, 2022
<i>/s/ Matthew Rizzo</i> Matthew Rizzo	Director	October 28, 2022

[Fox Rothschild LLP Letterhead]

October 28, 2022

Xtant Medical Holdings, Inc.
664 Cruiser Lane
Belgrade, Montana 59714

**Re: Xtant Medical Holdings, Inc.
Registration Statement on Form S-8**

Ladies and Gentlemen:

We have acted as counsel to Xtant Medical Holdings, Inc., a Delaware corporation (the "Company"), in connection with the Company's registration of an additional 8,500,000 shares (collectively, the "Shares") of the Company's common stock, par value \$0.000001 per share, issuable under the Xtant Medical Holdings, Inc. Second Amended and Restated 2018 Equity Incentive Plan (the "Plan") pursuant to a registration statement on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), filed by the Company with the Securities and Exchange Commission (the "SEC") on October 28, 2022.

In connection with this opinion, we have examined and relied upon the originals, or copies certified or otherwise identified to our satisfaction, of such records, documents, certificates, and other instruments as in our judgment are necessary or appropriate to enable us to render the opinions expressed below. As to certain factual matters, we have relied upon certificates of the officers of the Company and have not sought to independently verify such matters.

In rendering this opinion, we have assumed: the genuineness and authenticity of all signatures on original documents, including electronic signatures made and/or transmitted using electronic signature technology (e.g., via DocuSign or similar electronic signature technology); that any such signed electronic record shall be valid and as effective to bind the party so signing as a paper copy bearing such party's handwritten signature; the legal capacity of all natural persons; the authenticity of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as certified or photocopies; the authenticity of the originals of such latter documents; the accuracy and completeness of all documents and records reviewed by us; the accuracy, completeness and authenticity of certificates issued by any governmental official, office or agency and the absence of change in the information contained therein from the effective date of any such certificate; and, other than for the Company, the due authorization, execution and delivery of all documents where authorization, execution and delivery are prerequisites to the effectiveness of such documents.

Our opinion herein is expressed solely with respect to the General Corporation Law of the State of Delaware (including the statutory provisions, all applicable provisions of the Delaware Constitution, and reported judicial decisions interpreting the foregoing) and is based on these laws as in effect on the date hereof. We express no opinion as to whether the laws of any jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or other state law, rule, or regulation relating to securities, or to the sale or issuance thereof.

On the basis of the foregoing and in reliance thereon, and subject to the qualifications herein stated, we are of the opinion that the Shares registered pursuant to the Registration Statement have been duly and validly authorized and reserved for issuance and that upon the issuance of the Shares and payment therefor in accordance with the provisions of the Plan, the Shares will be validly issued, fully paid, and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the SEC thereunder. This opinion is expressed as of the date hereof, and we disclaim any undertaking to update or supplement this opinion or to advise you of any subsequent changes in the facts stated or assumed herein or of any subsequent changes in applicable law.

Very truly yours,

/s/ Fox Rothschild LLP

Consent of Independent Registered Public Accounting Firm

The Board of Directors
Xtant Medical Holdings, Inc.

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 8, 2022, with respect to the consolidated financial statements of Xtant Medical Holdings, Inc. included in its Annual Report on Form 10-K as of and for the years ended December 31, 2021 and 2020, as filed with the Securities and Exchange Commission.

/s/ Plante & Moran, PLLC

Denver, Colorado
October 28, 2022

Calculation of Filing Fee Tables

Form S-8
(Form Type)**Xtant Medical Holdings, Inc.**
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered ⁽¹⁾	Proposed Maximum Offering Price Per Unit ⁽²⁾	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common Stock, par value \$0.000001 per share	457(c) and 457(h)	8,500,000	\$ 0.64	\$ 5,440,000	\$110.20 per \$1,000,000	\$ 599.49
		Total Offering Amounts			\$ 5,440,000		\$ 599.49
		Total Fee Offsets					\$ 0.00
		Net Fee Due					\$ 599.49

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this registration statement will also cover any additional shares of common stock, par value \$0.000001 per share, of Xtant Medical Holdings, Inc. (the "Common Stock") that become issuable under the Xtant Medical Holdings, Inc. Second Amended and Restated 2018 Equity Incentive Plan by reason of any stock split, stock dividend, recapitalization or other similar transaction effected without the registrant's receipt of consideration which would increase the number of outstanding shares of Common Stock.

(2) Estimated solely for the purpose of calculating the amount of the registration fee and calculated pursuant to Rule 457(c) and Rule 457(h) under the Securities Act on the basis of the average of the high and low sales prices of the Common Stock, as reported by the NYSE American on October 24, 2022.