

Registration No. 333-212510
Registration No. 333-191248
Registration No. 333-187563
Registration No. 333-172891

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

POST-EFFECTIVE AMENDMENT NO. 1
TO

FORM S-8 REGISTRATION STATEMENT NO. 333-212510
FORM S-8 REGISTRATION STATEMENT NO. 333-191248
FORM S-8 REGISTRATION STATEMENT NO. 333-187563
FORM S-8 REGISTRATION STATEMENT NO. 333-172891

*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 Number)

**664 Cruiser Lane
Belgrade, Montana 59714
(406) 388-0480**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Bacterin International Equity Incentive Plan
Amended and Restated Bacterin International Equity Incentive Plan
Amended and Restated Xtant Medical Equity Incentive Plan
Non-Plan Inducement Stock Option**

(Full title of the plan)

**Sean E. Browne
President and Chief Executive Officer
Xtant Medical Holdings, Inc.
664 Cruiser Lane
Belgrade, Montana 59714
(406) 388-0480**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

**Amy E. Culbert, Esq.
Fox Rothschild LLP
City Center
33 South Sixth Street, Suite 3600
Minneapolis, Minnesota 55402
(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

DEREGISTRATION OF SECURITIES

These Post-Effective Amendments relate to the following Registration Statements on Form S-8 (collectively, the “Registration Statements”) previously filed by Xtant Medical Holdings, Inc. or its predecessor (the “Company” or “Registrant”) with the Securities and Exchange Commission (the “SEC”) and are being filed to deregister and remove from registration any and all shares of the Company’s common stock, par value \$0.000001 per share (the “Common Stock”), that remain unsold as of the date hereof under each of the following Registration Statements:

- Registration Statement on Form S-8 (Registration No. 333-212510) filed with the SEC on July 13, 2016 registering 1,000,000 (83,333 post-reverse stock split) shares of Common Stock to be issued to participants under the Amended and Restated Xtant Medical Equity Incentive Plan (the “Xtant Plan”);
- Registration Statement on Form S-8 (Registration No. 333-191248) filed with the SEC on September 19, 2013 registering 2,000,000 (16,666 post-reverse stock splits) shares of Common Stock to be issued to a participant under a Non-Plan Inducement Stock Option Agreement (the “Non-Plan Option”);
- Registration Statement on Form S-8 (Registration No. 333-187563) filed with the SEC on March 27, 2013 registering 3,000,000 (25,000 post-reverse stock splits) shares of Common Stock to be issued to participants under the Amended and Restated Bacterin International Equity Incentive Plan (the “Amended Bacterin Plan”); and
- Registration Statement on Form S-8 (Registration No. 333-172891) filed with the SEC on March 17, 2011 registering 6,000,000 (50,000 post-reverse stock splits) shares of the Common Stock to be issued to participants under the Bacterin International Equity Incentive Plan (the “Bacterin Plan” and collectively, with the Amended Bacterin Plan, the Non-Plan Option and the Xtant Plan, the “Plans”).

All Common Stock share numbers in the parentheticals above have been adjusted as appropriate to reflect the Company’s 1-for-10 reverse stock split effected on July 25, 2014 and its 1-for-12 reverse stock split effected on February 14, 2018.

As of the date of the filing of these Post-Effective Amendments, there are no remaining equity awards outstanding under the Plans; and therefore, the offerings of the shares of Common Stock described above pursuant to the Registration Statements have terminated.

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 these Post-Effective Amendments to the Registration Statements on Form S-8 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Belgrade, State of Montana, on May 13, 2026.

XTANT MEDICAL HOLDINGS, INC.

By: /s/ Sean E. Browne

Name: Sean E. Browne

Title: President and Chief Executive Officer

No other person is required to sign these Post-Effective Amendments in reliance on Rule 478 of the Securities Act of 1933, as amended.