

**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): **September 17, 2020**

MERSANA THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation)

001-38129
(Commission File Number)

04-3562403
(IRS Employer
Identification No.)

840 Memorial Drive
Cambridge, MA 02139
Cambridge, MA
(Address of principal executive offices)

02139
(Zip Code)

(Registrant's telephone number, including area code): **(617) 498-0020**

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))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, \$0.0001 par value	MRSN	The Nasdaq Global Select Market

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

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 8.01 Other Events.

On September 17, 2020, Mersana Therapeutics, Inc. (the “Company”) issued a press release reporting updated interim data from the ovarian cancer cohort of the XMT-1536 Phase 1 expansion study. The Company’s press release is attached as Exhibit 99.1 to this current report and is incorporated herein by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit No.	Description
99.1	Press Release of Mersana Therapeutics, Inc., dated September 17, 2020
104	The cover page from this Current Report on Form 8-K, formatted in Inline XBRL

SIGNATURES

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.

MERSANA THERAPEUTICS, INC.

By: /s/ Brian DeSchuytner
Brian DeSchuytner
Senior Vice President, Finance & Product Strategy

Date: September 17, 2020

Mersana Therapeutics Reports Updated Interim Data from the Ovarian Cancer Cohort of the XMT-1536 Phase 1 Expansion Study

- *Maintained 34% objective response rate and 79% disease control rate, including two complete responses*
 - *XMT-1536 continues to be generally well-tolerated with no new safety signals*
 - *Data to be presented and discussed during a conference call today at 8 a.m. ET*

CAMBRIDGE, Mass., September 17, 2020 -- Mersana Therapeutics, Inc. (NASDAQ:MRSN), a clinical-stage biopharmaceutical company focused on discovering and developing a pipeline of antibody-drug conjugates (ADCs) targeting cancers in areas of high unmet medical need, today reported updated interim safety, tolerability and efficacy data for the ovarian cancer cohort of the ongoing expansion portion of the Phase 1 study evaluating XMT-1536, its first-in-class ADC candidate targeting NaPi2b, as part of the 2020 European Society of Medical Oncology (ESMO) Virtual Congress. The Company will host a conference call and webcast today at 8:00 a.m. ET, during which investigator Erika Hamilton, MD, Director of the Breast Cancer and Gynecologic Cancer Research Program from the Sarah Cannon Research Institute at Tennessee Oncology, and members of the Mersana executive team will present and discuss these data.

“These data further support the continued development of XMT-1536, our first-in-class Dolaflexin ADC targeting NaPi2b, which has recently been granted FDA Fast Track Designation. We are eager to advance XMT-1536 into registration-enabling studies based on its observed antitumor activity and favorable safety profile in an ovarian cancer population with a very poor prognosis and limited treatment options,” said Anna Protopapas, President and Chief Executive Officer of Mersana Therapeutics. “Additionally, we look forward to presenting more comprehensive and mature results from the ongoing expansion cohort around the end of this year.”

This interim analysis focused on the ovarian cancer cohort of the Phase 1 expansion study, including heavily pre-treated patients with platinum-resistant or refractory ovarian cancer, fallopian tube or primary peritoneal cancer who have received up to three lines of prior therapy, and in some cases four lines of prior therapy regardless of platinum status. With a data cutoff of August 18, 2020 these data include 47 patients. These data include additional follow up on the 27 ovarian cancer patients previously presented at the American Society of Clinical Oncology (ASCO) virtual program in May of 2020 as well as 20 new patients who entered the study between May 1, 2020 and August 18, 2020.

Key findings include:

- **Safety profile consistent with previously reported expansion data and no new safety signals observed**
 - o The most frequently reported treatment-related adverse events (TRAEs) were generally Grade 1-2 fatigue, nausea, decreased appetite, vomiting and transient AST elevation without associated changes in bilirubin or cases of Hy’s law.

- o There were no reported cases of severe neutropenia, peripheral neuropathy or ocular toxicity.

Continued, significant anti-tumor activity in platinum-resistant and platinum-refractory ovarian cancer and in ovarian cancer previously treated with bevacizumab, PARP inhibitors, or both

- o Of the 29 patients that were evaluable for response, 2/29 (7%) achieved confirmed complete responses (CRs) and 8/29 (28%) achieved confirmed partial responses (PRs) for an objective response rate (ORR) of 34%. Additionally, 13/29 (45%) patients achieved stable disease (SD); the disease control rate (DCR) was 23/29 (79%).
 - 70% of responses were observed within two cycles and 100% of responses were observed within four cycles. Responses appeared to deepen over time, including responses in patients receiving reduced dose levels.
 - The majority of responders had prior treatment with bevacizumab, PARP inhibitors, or both. Both patients with confirmed CRs had prior treatment with bevacizumab and PARP inhibitors.
 - Reduction in tumor volume was observed in the majority of patients achieving a best response of stable disease.

Data continue to support a NaPi2b biomarker-based patient selection strategy based on depth, time on study and quality of response

- o 50% of patients with higher NaPi2b expression are ongoing in the study while only 33% of patients with lower Napi2b expression are ongoing in study. Median duration of response was not yet reached in the 7 patients with ovarian cancer with higher NaPi2b expression.
- o The Company expects to define the patient selection strategy based on the total data set from patients treated with XMT-1536.

Conference Call Details

Mersana Therapeutics will host a conference call and webcast today at 8:00 a.m. ET to discuss these data. To access the call, please dial 877-303-9226 (domestic) or 409-981-0870 (international) and provide the Conference ID 5731456. A live webcast of the presentation will be available on the Investors & Media section of the Mersana website at www.mersana.com.

About Mersana Therapeutics

Mersana Therapeutics is a clinical-stage biopharmaceutical company using its differentiated and proprietary ADC platforms to rapidly develop novel ADCs with optimal efficacy, safety and tolerability to meaningfully improve the lives of people fighting cancer. Mersana's lead product candidate, XMT-1536, is in the expansion portion of a Phase 1 proof-of-concept clinical study in patients with ovarian cancer and NSCLC adenocarcinoma. XMT-1592, Mersana's second ADC product candidate targeting NaPi2b-expressing tumors, was created using Mersana's customizable and homogeneous Dolasynthen platform and is in the dose escalation portion of a Phase 1 proof-of-concept clinical study. The Company's early stage programs include a B7-H4 targeting ADC, as well as a STING-agonist ADC developed using the Company's Immunosynthen platform. In addition, multiple partners are using Mersana's Dolaflexin platform to advance their ADC pipelines.

Forward-Looking Statements

This press release contains “forward-looking” statements within the meaning of federal securities laws. These forward-looking statements are not statements of historical facts and are based on management’s beliefs and assumptions and on information currently available to management. Forward-looking statements include information concerning the Company’s business strategy and the design, progression and timing of its clinical trials. Forward-looking statements generally can be identified by terms such as “aims,” “anticipates,” “believes,” “contemplates,” “continues,” “could,” “estimates,” “expects,” “goal,” “intends,” “may,” “on track,” “plans,” “possible,” “potential,” “predicts,” “projects,” “seeks,” “should,” “target,” “will,” “would” or similar expressions and the negatives of those terms. Forward-looking statements represent management’s beliefs and assumptions only as of the date of this press release. The Company’s operations involve risks and uncertainties, many of which are outside its control, and any one of which, or combination of which, could materially affect its results of operations and whether the forward-looking statements ultimately prove to be correct. Factors that may materially affect the Company’s results of operations and whether these forward-looking statements prove to be correct include, among other things, that preclinical testing may not be predictive of the results or success of ongoing or later preclinical or clinical trials, that the development and testing of the Company’s product candidates and new platforms will take longer and/or cost more than planned, and that the identification of new product candidates will take longer than planned, as well as those listed in the Company’s Annual Report on Form 10-K filed on February 28, 2020, with the Securities and Exchange Commission (“SEC”), the Company’s Quarterly Report on Form 10-Q filed on May 8, 2020, with the SEC and subsequent SEC filings. In addition, while we expect that the COVID-19 pandemic might adversely affect the Company’s preclinical and clinical development efforts, business operations and financial results, the extent of the impact on the Company’s operations and the value of and market for the Company’s common stock will depend on future developments that are highly uncertain and cannot be predicted with confidence at this time, such as the ultimate duration of the pandemic, travel restrictions, quarantines, physical distancing and business closure requirements in the U.S. and in other countries, and the effectiveness of actions taken globally to contain and treat the disease. Except as required by law, the Company assumes no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

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