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): August 8, 2019

MERSANA THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware

001-38129

04-3562403

(State or other jurisdiction of incorporation)

(Commission File Number)

(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:

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o 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 x

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. x

Item 2.02 Results of Operations and Financial Condition.

On August 8, 2019, Mersana Therapeutics, Inc., issued a press release announcing its financial results for the quarter ended June 30, 2019. A copy of the press release is furnished as Exhibit 99.1 to this Current Report on Form 8-K.

The information contained in this Current Report on Form 8-K, including Exhibit 99.1 attached hereto, is being furnished and shall not be deemed "filed" for the purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and shall not be deemed 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.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits	
Exhibit No.	Description
99.1	Press Release by Mersana Therapeutics, Inc., on August 8, 2019
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EXHIBIT INDEX

No.	Description			
99.1	Press Release by Mersana Therapeutics, Inc., on August 8, 2019			
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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: August 8, 2019

Mersana Therapeutics Announces Second Quarter 2019 Financial Results and Provides Business Updates

Patient Dosing in XMT-1536 Phase 1 Expansion Study Expected to Commence in Third Quarter 2019

Ended Second Quarter 2019 with \$128 Million in Cash

CAMBRIDGE, Mass., August 08, 2019 — 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 financial results and a business update for the second quarter ended June 30, 2019.

"In the second quarter, we reported encouraging clinical activity and tolerability for our first-in-class, wholly-owned ADC candidate, XMT-1536, in heavily pretreated cancer patients without selection for NaPi2b expression," said Anna Protopapas, President and CEO of Mersana Therapeutics. "We are on track with the execution of our 2019 goals, including selecting a dose and initiating enrollment in the Phase 1 expansion study of XMT-1536 and bringing forward our next ADC candidate."

Recent Highlights and Updates

Clinical Program

- Presented interim Phase 1 data for XMT-1536 at the 2019 American Society of Clinical Oncology (ASCO) Annual Meeting in June 2019. XMT-1536 is a first-in-class, wholly-owned Dolaflexin ADC targeting NaPi2b, which is broadly expressed in epithelial ovarian cancer and non-small cell lung cancer (NSCLC) adenocarcinoma. These data showed that XMT-1536 is clinically active at well-tolerated doses in heavily pretreated and unselected patients. As of May 10, 2019, the data cutoff date for the ASCO disclosure, XMT-1536 was well-tolerated at doses up to 30 mg/m², with observation of objective responses at 20 mg/m² and higher. Patients (N=37) were heavily pretreated, with a median of four prior lines of treatment (range 1-13) for all patients and a median of five lines of prior treatment in ovarian cancer patients (range 1-11). Interim results included:
 - The most common treatment-related adverse events (TRAEs) were Grade 1-2 nausea, fatigue, and headache, and the most frequent Grade 3 TRAE was transient AST elevation without associated changes in bilirubin.
 - In patients with tumor types selected for the planned expansion phase (platinum-resistant ovarian cancer and NSCLC adenocarcinoma) treated at ≥20 mg/m² (N=18), three (17%) achieved partial responses (PRs) and eight (44%) achieved stable disease (SD) for a disease control rate (DCR) of 11/18 (61%), and a treatment duration lasting beyond 16 weeks in 9 patients (50%).
 - · In ovarian cancer patients treated at \geq 30 mg/m² (N=7), two (28%) achieved partial responses (PRs) and three (43%) achieved stable disease (SDs) for a disease control rate (DCR) of 5/7 (71%), and three of these patients (43%) were treated on study for more than 16 weeks.

- The Phase 1 dose escalation study of XMT-1536 for the treatment of NaPi2b-expressing cancers remains ongoing. The Company continues to evaluate patients in the 36 mg/m² once-every-four-week dosing cohort and the maximum tolerated dose has not yet been reached. The Company expects to select a dose and initiate expansion cohorts in the third quarter of 2019.
- **Site initiation continues for the dose expansion portion of the XMT-1536 Phase 1 study.** Mersana continues to add sites in anticipation of dosing patients in the expansion groups in the third quarter of 2019. In the first group, the Company plans to enroll platinum-resistant ovarian cancer patients who have failed standard therapy. The second patient group will enroll NSCLC adenocarcinoma patients who have failed front line platinum-based chemotherapy with anti-PD-1 or anti-PD-L1 therapy.

Discovery & Platform Progress

Mersana expects to disclose its next ADC clinical candidate around year end, further strengthening its scientific leadership in ADC development. The Company is targeting the filing of its next Investigational New Drug (IND) application with the U.S. Food and Drug Administration (FDA) in the first half of 2020.

Corporate Updates

- · Completed non-dilutive debt financing for additional financial flexibility. On May 8, 2019, the Company completed a non-dilutive debt financing with Silicon Valley Bank (SVB) that provides Mersana with the ability to draw up to \$20.0 million, the proceeds of which will be used for general corporate and working capital purposes.
- · Added significant strategic and operational expertise in oncology to Mersana's leadership team. On June 12, 2019, the Company announced the appointment of Brian C. DeSchuytner as Senior Vice President of Finance and Product Strategy. Mr. DeSchuytner is an accomplished life science professional with nearly two decades of experience spanning corporate strategy, finance, product development, and commercial launch. Most recently, Mr. DeSchuytner was Vice President responsible for ZEJULA® (niraparib) commercialization in ovarian cancer at TESARO. Prior to that he was Vice President responsible for the NINLARO® (ixazomib) global launch at Takeda Oncology. Earlier in his career, Brian held corporate development and strategy roles of increasing responsibility at Takeda Oncology and was a leader in the life sciences practice of L.E.K. Consulting.

Upcoming Events

- · The Company will give a corporate presentation on August 13, 2019, at the 2019 Wedbush PacGrow Healthcare Conference in New York City.
- · The Company will give a corporate presentation on September 4, 2019, at the Baird Healthcare Conference in New York City.
- The Company will give a corporate presentation at the H.C. Wainwright Healthcare Conference in New York City taking place from September 8 to 10, 2019.

• The Company will present preclinical data from its proprietary, novel Immunosynthen platform at the upcoming 10th Annual World ADC conference on October 9, 2019 in San Diego, CA.

2019 Financial Results

· Cash, cash equivalents and marketable securities as of June 30, 2019, were \$128.2 million, compared to \$70.1 million as of December 31, 2018. On March 5, 2019 the Company completed a public equity offering with gross proceeds of \$97.8 million. On May 8, 2019, the Company completed a non-dilutive debt financing with Silicon Valley Bank (SVB) that provides Mersana with the ability to draw up to \$20.0 million. The Company drew \$5.0 million upon the execution of the agreement. The Company used net cash of \$14.2 million in operations in the second quarter of 2019. The Company expects that its cash, cash equivalents and marketable securities will enable it to fund its operating plan into at least mid-2021.

Second Quarter 2019

- · Collaboration revenue for the second quarter 2019 was approximately \$0.2 million, compared to \$4.2 million for the same period in 2018. The decrease in collaboration revenue was primarily a result of the termination of the XMT-1522 collaboration with Takeda, the timing of efforts to support partner programs, and the recognition of a milestone payment during the three months ended June 30, 2018.
- Research and development expenses for the second quarter 2019 were approximately \$13.8 million, compared to \$12.7 million for the same period in 2018, driven primarily by an increase in external costs for the Company's next clinical candidate as well as modest increases in headcount and facilities costs. The increase was offset by a decrease in external clinical and regulatory expenses due to the discontinuation of the XMT-1522 clinical program and timing of manufacturing costs for XMT-1536.
- · General and administrative expenses for the second quarter 2019 remained flat at \$4.2 million, compared to the same period in 2018. An increase in employee-related expenses was primarily due to an increase in headcount, but that increase was offset by a decrease in consulting and professional fees
- Net loss for the second quarter 2019 was \$17.1 million, or \$0.36 per share, compared to a net loss of \$12.4 million, or \$0.54 per share, for the same period in 2018. Weighted average common shares outstanding for the quarters ended June 30, 2019 and June 30, 2018, were 47,708,085 and 22,966,314 respectively.

Conference Call

Mersana Therapeutics will host a conference call and webcast today at 8:00 a.m. ET to report financial results for the second quarter of 2019 and provide certain business updates. To access the call, please dial 877-303-9226 (domestic) or 409-981-0870 (international) and provide the Conference ID 5554418. A live webcast of the presentation will be available on the Investors & Media section of the Mersana website at www.mersana.com.

About XMT-1536

XMT-1536 is a Dolaflexin ADC targeting the sodium-dependent phosphate transport protein (NaPi2b) and is comprised of an average of 10-15 DolaLock payload molecules conjugated to XMT-1535, a proprietary humanized anti-NaPi2b antibody. NaPi2b is an antigen expressed in the majority of non-small cell lung cancer (NSCLC) adenocarcinoma and ovarian cancer. XMT-1536 is in Phase 1 clinical trials in patients with tumors expressing NaPi2b, including ovarian cancer, NSCLC adenocarcinoma and other cancers. More information on the ongoing Phase 1 clinical trial can be found at clinicaltrials.gov.

About Mersana Therapeutics

Mersana Therapeutics is a clinical-stage biopharmaceutical company using its differentiated and proprietary ADC platforms and its modular Synthemer scaffold to develop highly targeted drugs with increased tolerability and expanded opportunities to deliver meaningful clinical benefit to cancer patients. Mersana's lead product candidate, XMT-1536, is in a Phase 1 clinical trial in patients with tumors expressing NaPi2b, including ovarian cancer, NSCLC adenocarcinoma, and other cancers. In addition, multiple partners are using Mersana's 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 "anticipates," "believes," "could," "seeks," "estimates," "intends," "may," "plans," "potential," "predicts," "projects," "should," "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 March 8, 2019, with the Securities and Exchange Commission ("SEC") and subsequent SEC filings. 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 becom

Mersana Therapeutics, Inc. Selected Condensed Consolidated Balance Sheet Data (in thousands) (unaudited)

	 June 30, 2019	 December 31, 2018
Cash, cash equivalents and marketable securities	\$ 128,177	\$ 70,131
Working capital (1)	107,699	4,880
Total assets	139,382	78,502
Total stockholders' equity	108,514	8,795

⁽¹⁾ The Company defines working capital as current assets less current liabilities. See the Company's condensed consolidated financial statements for further detail regarding its current assets and current liabilities.

Mersana Therapeutics, Inc. Condensed Consolidated Statement of Operations (in thousands, except share and per share data) (unaudited)

	Three months ended		Six months ended				
	June 30, 2019		June 30, 2018		June 30, 2019		June 30, 2018
	 2013		2010		2019		2010
Collaboration revenue	\$ 202	\$	4,191	\$	41,237	\$	7,255
Operating expenses:							
Research and development	13,766		12,663		28,909		24,919
General and administrative	4,192		4,231		8,635		7,801
Total operating expenses	17,958		16,894		37,544		32,720
Other income (expense), net	685		349		1,137		709
Net income (loss)	\$ (17,071)	\$	(12,354)	\$	4,830	\$	(24,756)
Other comprehensive income (loss):							
Unrealized gain on marketable securities	11		72		19		59
Comprehensive income (loss)	\$ (17,060)	\$	(12,282)	\$	4,849	\$	(24,697)
Net income (loss) per share attributable to common stockholders							· · · · · · · · · · · · · · · · · · ·
— basic and diluted	\$ (17,071)	\$	(12,354)	\$	4,830	\$	(24,756)
Net income (loss) per share attributable to common stockholders					-		
- basic	\$ (0.36)	\$	(0.54)	\$	0.12	\$	(1.08)
Net income (loss) per share attributable to common stockholders							
- diluted	\$ (0.36)	\$	(0.54)	\$	0.12	\$	(1.08)
Weighted-average number of common shares used in net income							
(loss) per share attributable to common stockholders — basic	 47,708,085		22,966,314		39,051,958		22,891,831
Weighted-average number of common shares used in net income	 						
(loss) per share attributable to common stockholders —							
diluted	 47,708,085		22,966,314		40,184,374		22,891,831

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Contact:

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