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): **March 28, 2018**

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**	**02139**
(Address of principal executive offices)	(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))

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 March 28, 2018, Mersana Therapeutics, Inc. issued a press release announcing its financial results for the fourth quarter and year ended December 31, 2017. 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 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 issued by Mersana Therapeutics, Inc. on March 28, 2018.

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/ Anna Protopapas
Anna Protopapas
President and Chief Executive Officer

Date: March 28, 2018

Exhibit 99.1

Mersana Therapeutics Announces Fourth Quarter and Full Year 2017 Financial Results and Provides Business Updates

Enrollment on Track for Phase 1 Trial of XMT-1522 Patients with Advanced Tumors Expressing HER2

Progressing Phase 1 Trial of XMT-1536, First-in-Class Dolaflexin® Antibody Drug Conjugate Targeting NaPi2b

Appointed David A. Spellman, previously of Vertex Pharmaceuticals, as Chief Financial Officer and Willard H. Dere, M.D., Professor at the University of Utah and retired Chief Medical Officer of Amgen, to Board of Directors

Conference Call to be Held Today at 8:00 a.m. ET

CAMBRIDGE, Mass., March 28, 2018 — Mersana Therapeutics, Inc. (NASDAQ:MRSN), a clinical-stage biopharmaceutical company focused on discovering and developing a pipeline of antibody drug conjugates (ADCs) based on its Dolaflexin and other proprietary platforms, today reported financial results and a business update for the fourth quarter and full year ended December 31, 2017.

"Our achievements in 2017 demonstrate our ability to build a transformative ADC pipeline of innovative oncology product candidates. Our two lead ADC product candidates, XMT-1522 and XMT-1536, have progressed through significant clinical milestones," said Anna Protopapas, President and CEO of Mersana Therapeutics. "Overall, we are making great strides in achieving our vision of creating a significant difference in patients' lives."

Recent Highlights and Updates

Clinical Programs

- **Currently dosing the seventh cohort in the ongoing Phase 1 dose escalation study of XMT-1522**. XMT-1522 is a Dolaflexin ADC targeting all types of HER2-expressing breast cancer, non-small cell lung cancer (NSCLC) and gastric cancer. The trial design comprises two parts: a dose escalation phase to determine a maximum tolerated dose (MTD); followed by the enrollment of expansion cohorts to establish efficacy in five distinct patient populations. Dose escalation is ongoing, and a MTD has not yet been reached. The Company has submitted an abstract for disclosure of preliminary clinical data from the dose escalation study at the 2018 American Society of Clinical Oncology (ASCO) Annual Meeting in June of this year.

- **Initiated a Phase 1 dose escalation study of XMT-1536 and completed enrollment of three dose cohorts**. XMT-1536 is a first-in-class Dolaflexin ADC targeting NaPi2b, a clinically validated ADC target broadly expressed in epithelial ovarian cancer and non-squamous NSCLC, as well as several other rare tumor types. The trial design comprises two parts: a dose escalation phase; followed by the enrollment of expansion cohorts. The Company expects to disclose initial results from the dose escalation study at a medical meeting upon establishing MTD.

- **Presented XMT-1536 efficacy data in a panel of ovarian patient derived xenograft mouse studies at AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics.**

The data presented support the potential for XMT-1536 to have broad activity in epithelial ovarian cancer.

Discovery & Platform Progress

- **Advanced the characterization of the Dolalock technology**. The Company plans to present preclinical data at the 2018 American Association for Cancer Research (AACR) Annual Meeting in October showing that the novel AF-HPA payload used in the Dolaflexin platform allows for a controlled bystander effect that has the potential to contribute enhanced efficacy and tolerability of Dolaflexin-based ADCs.

- **Continued development of new molecules and novel platforms, strengthening Mersana's ADC leadership.** The Company is leveraging Dolaflexin as well as new platforms to develop additional ADCs with the potential to address significant unmet medical need in new therapeutic areas. The additional platforms incorporate new payloads designed to expand therapeutic benefit and new linkers designed to allow for exact Drug to Antibody ratios (DARs).

- **Supported our partner Takeda in advancing its first Dolaflexin ADC development candidate to preclinical IND-enabling studies**.

Corporate Highlights

- **Appointed David A. Spellman, previously of Vertex Pharmaceuticals, as Chief Financial Officer.** Mr. Spellman's extensive strategic and operational finance experience in fast-growing life sciences companies will support Mersana's ambitious growth and expansion plans.

- **Appointed Willard H. Dere, M.D., Professor at the University of Utah and retired Chief Medical Officer of Amgen, to Board of Directors**. Dr. Dere brings more than 30 years of research, clinical and regulatory experience in biopharmaceutical leadership.

- **In December 2017, Mersana was added to the NASDAQ Biotechnology Index (NBI).** This is a result of meeting eligibility requirements, which include minimum market capitalization and average daily trading volume, among other criteria.

2018 Goals

Mersana presented the following 2018 Corporate Goals in January at the 36th Annual J.P. Morgan Healthcare conference:

- Continue XMT-1522 dose escalation study to establish MTD and present the dose escalation data at a scientific conference.
- Select Recommended Phase 2 Dose (RP2D) of XMT-1522 and substantially enroll dose expansion cohorts.

- Continue XMT-1536 dose escalation study to establish MTD. If MTD is established, select RP2D and initiate enrollment of expansion cohorts with data expected at a future medical meeting.
- Select the next ADC clinical candidate and disclose pre-clinical data at a scientific meeting.

- Disclose new proprietary platform technologies at a scientific meeting.
- Continue to recruit top talent and maintain a culture of scientific excellence, focused execution, and prioritization of patient needs.

Upcoming Events

- The Company plans to give a presentation at the American Association for Cancer Research Annual Meeting 2018 from April 14-18 in Chicago
- The Company plans to give a corporate presentation at the Deutsche Bank Securities 43rd Annual Health Care Conference from May 8-9 in Boston

Financial Results

Cash, cash equivalents and marketable securities as of December 31, 2017 were $125.2 million, compared to $100.3 million as of December 31, 2016. The Company expects that its cash, cash equivalents and marketable securities will enable it to fund its operating plan through at least mid-2019.

Fourth Quarter 2017

- Collaboration revenue for the fourth quarter 2017 was approximately $3.3 million, compared to $12.0 million for the same period in 2016. The decrease was largely the result of timing of activities performed under the XMT-1522 agreement with Takeda that drives deferred revenue.
- Research and development expenses for the fourth quarter 2017 were approximately $14.6 million, compared to $8.8 million for the same period in 2016. The increase was primarily due to increased personnel costs as well as external R&D and manufacturing activities for our two lead clinical programs.
- General and administrative expenses for the fourth quarter 2017 were approximately $3.1 million, compared to $1.9 million for the same period in 2016. The increase was primarily due to increased personnel costs to support the growth of the research and development organization as well as increased professional fees to support operations as a public company.
- Net loss for the fourth quarter 2017 was $14.0 million, or $0.61 per share, compared to a net income of $1.3 million, or $0.07 per share, for the same period in 2016. Weighted average common shares outstanding for the years ended December 31, 2017 and December 31, 2016, were 22,750,425 and 1,290,224, respectively.

Full Year 2017

- Collaboration revenue for the full year 2017 was approximately $17.5 million, compared to $25.2 million for the full year 2016. The decrease was largely the result of timing of activities performed under the XMT-1522 agreement with Takeda, partially offset by an increase in revenue due to the impact of changes in estimates of the total costs to complete the research services under the XMT-1522 and platform target Takeda agreements.
- Research and development expenses for the full year 2017 were approximately $46.7 million, compared to $32.0 million for the full year 2016. The increase was primarily due to higher personnel costs as well as external R&D and manufacturing activities for our two lead programs as they progressed into Phase 1 dose escalation.
- General and administrative expenses for the full year 2017 were approximately $10.5 million, compared to $7.0 million for the full year 2016. The increase was primarily due to higher

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personnel costs to support the growth of the research and development organization as well as increase professional fees to support operations as a public company.
- Net loss for the full year 2017 was $38.7 million, or $3.22 per share, compared to a net loss of $13.7 million, or $10.82 per share, for the full year 2016. Weighted average common shares outstanding for the periods ended December 31, 2017 and December 31, 2016, were 12,022,733 and 1,266,758, 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 fourth quarter and full year 2017 and provide certain business updates. To access the call, please dial 866-363-0156 (domestic) or 706-902-3589 (international) and provide the Conference ID 2057979. A live webcast of the presentation will be available on the Investors & Media section of the Mersana website at www.mersana.com.

About the Dolaflexin Platform

Mersana's lead platform, Dolaflexin, is designed to increase the potency and efficacy of ADCs while simultaneously increasing the safety and tolerability. The backbone of Dolaflexin is Fleximer®, a biodegradable, biocompatible, highly water-soluble polymer, to which are attached multiple molecules of Mersana's proprietary auristatin drug payload. Because of the excellent physicochemical properties provided by the polymer, ADCs can be created with drug-antibody ratios of 10-15, significantly higher than what is achieved with traditional ADC approaches. More drugs per antibody has resulted in preclinical trials in more efficient payload delivery to the tumor cell, particularly for targets with low expression levels, leading to greater potency and efficacy. In addition, Mersana's proprietary auristatin payload contained in Dolaflexin has been designed with DolaLock technology, a controlled bystander effect, thereby increasing tolerability. The initial release product upon internalization of the ADC is a form of auristatin which is freely cell permeable and can kill adjacent cells. However, a metabolic "trigger" has been incorporated into the auristatin payload such that as it diffuses in the tumor environment it is converted into a highly active payload, which is no longer freely cell permeable, resulting in its becoming "locked" into the cell in which it is formed, thereby increasing tolerability.

About Mersana Therapeutics

Mersana Therapeutics is a clinical-stage biopharmaceutical company using its differentiated and proprietary ADC platforms to develop highly targeted drugs with increased tolerability and expanded opportunities to deliver meaningful clinical benefit to patients. Mersana's lead product candidate, XMT-1522, is in Phase 1 clinical trials in patients with advanced tumors expressing HER2, including breast cancer, non-small-cell-lung-cancer (NSCLC) and gastric cancer patients. The Company's second product candidate, XMT-1536, is in Phase 1 clinical trials in patients with tumors expressing NaPi2b, including ovarian cancer, NSCLC 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 availability of clinical data and the design of the Company's clinical trials. Forward-looking statements generally can be identified by terms such as "expects," "anticipates," "believes," "could," "seeks," "estimates," "intends," "may," "plans,"

"potential," "predicts," "projects," "should," "will," "would" or similar expressions and the negatives of those terms. 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 include, among other things, that preclinical testing may not be predictive of the results or success of ongoing or later preclinical or clinical trials and that the development of the Company's product candidates will take longer and/or cost more than planned, as well as those listed in the Company's Quarterly Report on Form 10-Q filed on November 13, 2017 with the Securities and Exchange Commission ("SEC"). 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.

Copies of the Company's Quarterly Report on Form 10-Q and other SEC filings are available by visiting EDGAR on the SEC website at http://www.sec.gov.

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

	December 31, 2017	December 31, 2016
Cash, cash equivalents and marketable securities	$ 125,216	$ 100,297
Working capital (1)	85,662	73,787
Total Assets	130,715	105,087
Convertible preferred stock	—	94,450
Total stockholders' equity (deficit)	69,994	(55,619)

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

	Three months ended		Year ended	
	December 31, 2017	December 31, 2016	December 31, 2017	December 31, 2016
Collaboration revenue	$ 3,261	$ 11,997	$ 17,545	$ 25,171
Operating expenses:				
Research and development	14,555	8,846	46,700	32,008
General and administrative	3,057	1,939	10,462	6,984
Total operating expenses	17,612	10,785	57,162	38,992
Other income	383	47	910	121
Net income (loss)	$ (13,968)	$ 1,259	$ (38,707)	$ (13,700)
Net income attributable to participating securities	$ —	$ (1,166)	$ —	$ —
Net income (loss) attributable to common stockholders	$ (13,968)	$ 93	$ (38,707)	$ (13,700)
Net loss per share attributable to common stockholders — basic	$ (0.61)	$ 0.07	$ (3.22)	$ (10.82)
Net loss per share attributable to common stockholders — diluted	$ (0.61)	$ 0.07	$ (3.22)	$ (10.82)
Weighted-average number of common shares used in net loss per share attributable to common stockholders — basic	22,750,425	1,290,224	12,022,733	1,266,758
Weighted-average number of common shares used in net loss per share attributable to common stockholders — diluted	22,750,425	2,647,181	12,022,733	1,266,758

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