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): **February 26, 2021**

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:

☐ 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 2.02 Results of Operations and Financial Condition.

On February 26, 2021, Mersana Therapeutics, Inc., issued a press release announcing its financial results for the fourth quarter and year ended December 31, 2020. 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 February 26, 2021
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: February 26, 2021

Exhibit 99.1

Mersana Therapeutics Announces Fourth Quarter and Full Year 2020 Financial Results and Provides Business Update

- *UPLIFT, a single-arm registration strategy evaluating upifitamab rilsodotin (UpRi) in platinum-resistant ovarian cancer, on track to begin in Q1 2021*

- *Significantly progressed pipeline of ADC candidates from the Company's innovative Dolasynthen and Immunosynthen platforms*

- *Ended 2020 with $255 million in cash*

CAMBRIDGE, Mass., February 26, 2021 -- 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 provided a business update for the fourth quarter and full year ended December 31, 2020.

"In 2020, we demonstrated compelling proof of concept for UpRi in heavily pretreated ovarian cancer and advanced our pipeline of highly differentiated DolaLock and Immunosynthen ADCs. We are well positioned for an equally productive 2021 as we focus on building UpRi as a foundational therapy for the treatment of ovarian cancer and building out our robust and maturing pipeline of ADC candidates. For UpRi, we are on track to initiate UPLIFT, our single-arm registration strategy in platinum-resistant ovarian cancer in the first quarter and plan to initiate the UPGRADE combination umbrella study to explore the role of UpRi in earlier stages of the disease in the third quarter of 2021. This is an important first step in a lifecycle management plan in earlier lines of therapy," said Anna Protopapas, President and Chief Executive Officer of Mersana Therapeutics. "With respect to building out the pipeline, we are planning to report data from the ongoing Phase I expansion cohort of UpRi in lung adenocarcinoma as well as data from the Phase I dose escalation study of XMT-1592 in the second half of 2021. We also intend to progress IND-enabling activities for XMT-1660 and XMT-2056 with the intention of advancing into clinical development in 2022."

Recent Highlights and Anticipated Milestones

Upifitamab Rilsodotin (UpRi, XMT-1536), first-in-class Dolaflexin ADC targeting NaPi2b:

- **UPLIFT single-arm registration strategy in platinum-resistant ovarian cancer on track to initiate in first quarter of 2021.** Informed by feedback from a meeting with the U.S Food and Drug Administration (FDA), the Company plans to initiate UPLIFT, a single-arm registration strategy to evaluate the safety and efficacy of UpRi in platinum-resistant ovarian cancer patients who have received up to four lines of therapy. Consistent with the bevacizumab label, platinum-resistant ovarian cancer patients previously treated with three or four lines of therapy may enroll without regard to prior bevacizumab treatment. Platinum-resistant ovarian cancer patients who received one or two lines of therapy will be required to have had prior bevacizumab treatment. Patients may enroll without regard to NaPi2b expression; however, the role of the biomarker will be evaluated. The primary endpoint will be the objective response rate (ORR) in the higher NaPi2b population and the secondary endpoints will be the ORR regardless of NaPi2b expression, as well as duration of response and safety. The single-arm registration strategy will be initiated as an amendment to the ongoing multinational, multi-center, open label study protocol, and the Company expects to enroll approximately 100 patients with higher NaPi2b expression and up to 180 patients overall. The Company is on track to finalize the biomarker strategy and the cutoff for the proposed commercial diagnostic in UPLIFT.

- **Reported updated Phase 1 ovarian cancer expansion cohort study data in January 2021.** In January 2021, the Company presented updated data with a cutoff of December 3, 2020, which included 72 patients evaluable for safety and 47 patients evaluable for RECIST response in the ongoing expansion portion of the Phase 1 study of UpRi in ovarian cancer. These data continued to demonstrate encouraging antitumor activity in heavily pretreated patients with ovarian cancer, with an ORR of 32% including complete responses and a disease control rate (DCR) of 74% in the higher NaPi2b population. Activity was also observed in the overall population, regardless of NaPi2b expression, with an ORR of 28% and a DCR of 68%. The majority of responses occurred by the first scan, and the median duration of response was approximately five months in the higher NaPi2b population. UpRi's tolerability profile remained consistent with previous data disclosures and continues to demonstrate a differentiated profile without the severe neutropenia, peripheral neuropathy, or ocular toxicity that can be observed for other ADCs. These data suggest the potential to achieve a clinically meaningful benefit in platinum-resistant ovarian cancer, where the single-agent chemotherapy standard of care has an ORR of 4% to 12% and expected overall survival of less than a year.

- **UPGRADE umbrella combination study in ovarian cancer expected to initiate in the third quarter of 2021**. The Company plans to initiate the UPGRADE study in the third quarter of 2021 to evaluate the combination of UpRi with other agents, starting with a platinum chemotherapy combination dose escalation cohort. This study is designed to inform the lifecycle management strategy for UpRi in earlier lines of ovarian cancer, including platinum-sensitive disease.

- **NSCLC adenocarcinoma cohort of the expansion portion of Phase 1 study continues to enroll patients.** The Company is on track to recruit approximately 40 patients in the expansion phase of the study. The Company plans to report interim data in the second half of 2021.

XMT-1592, first Dolasynthen ADC targeting NaPi2b:

- **Phase 1 dose escalation study of XMT-1592 enrolling patients with interim data anticipated in the second half of 2021.** XMT-1592 is the Company's first clinical candidate created using its new Dolasynthen ADC platform. In preclinical studies, XMT-1592 showed four times greater efficacy in a patient-derived lung tumor model in comparison to UpRi. The Company continues dose escalation and plans to disclose interim data in the second half of 2021 and outline the XMT-1592 development plan in NSCLC in the fourth quarter of 2021.

XMT-1660, first-in-class Dolasynthen ADC targeting B7-H4:

- **Completion of XMT-1660 IND-enabling studies expected in the fourth quarter of 2021.** B7-H4 is expressed in high unmet need tumors such as triple-negative breast cancer, ER-positive breast cancer, and NSCLC. B7-H4 is expressed on both tumor cells and immunosuppressive tumor-associated macrophages (TAMs). This provides the potential for both a direct, cytotoxic antitumor effect as well as for additional payload delivery to the tumor microenvironment that can further contribute to immunogenic cell death, dendritic cell activation, and stimulation of an immune response consistent with the features of the Company's unique DolaLock payload. The Company plans to initiate a Phase 1 dose escalation study of XMT-1660 in early 2022.

XMT-2056, first Immunosynthen STING-agonist ADC:

- **Completion of XMT-2056 IND-enabling studies expected in the fourth quarter of 2021.** In November 2020, the Company introduced XMT-2056 and presented preclinical data that supported the potential differentiation of the Immunosynthen platform from other innate immune stimulatory approaches and its potential applicability across multiple targets and indications. The Company plans to disclose the target for this program in the fourth quarter of 2021 and to initiate a Phase 1 dose escalation study in early 2022.

Corporate

- **Appointed Chief Human Resources Officer.** In January 2021, Mersana announced that Carla Poulson has joined the company as Chief Human Resources Officer. Ms. Poulson was most recently Chief Human Resources Officer at Akcea Therapeutics where she played an integral role in building the organization including recruiting several members of the senior management team. Before that, she served in multiple roles at Vertex Pharmaceuticals for over 10 years including as Head of International Human Resources where she was instrumental in helping build the organization to over two hundred fifty employees in just two years.

Upcoming Events

- Mersana will participate in a virtual panel presentation at the Cowen 41st Annual Health Care Conference on Tuesday, March 2, 2021 at 12:50 p.m. ET.
- Mersana will present preclinical data for XMT-1660, XMT-2056 and its novel Immunosynthen STING-agonist ADC platform in the e-poster session at the American Association for Cancer Research (AACR) Virtual Annual Meeting scheduled for April 10-15, 2021.

2020 Financial Results

Cash and cash equivalents as of December 31, 2020, were $255.1 million, compared to $99.8 million in cash, cash equivalents and marketable securities as of December 31, 2019. In addition, the Company has the option to draw additional funds through its debt financing agreement with Silicon Valley Bank.

Net cash used in operating activities in the fourth quarter of 2020 was $17.3 million. The Company expects that its available funds will be sufficient to support its operating plan commitments for approximately the next two years.

Fourth Quarter 2020

- Research and development expenses for the fourth quarter of 2020 were approximately $22.9 million, compared to $12.4 million for the same period in 2019. The difference was primarily due to an increase in UpRi and XMT-1592 clinical expenses, an increase in manufacturing activities for UpRi and discovery stage programs, an increase in headcount, and a non-cash increase in valuation of stock-based awards as a result of stock appreciation. The increase was partially offset by a decrease in preclinical development and manufacturing expenses for XMT-1592.
- General and administrative expenses for the fourth quarter of 2020 were approximately $5.9 million, compared to $4.2 million during the same period in 2019 primarily due to an increase in consulting and professional fees, an increase in facility-related costs as a result of the extension of the Company's lease, and a non-cash increase in valuation of stock-based awards as a result of stock appreciation.
- Net loss for the fourth quarter of 2020 was $28.8 million, or $0.42 per share, compared to net loss of $16.2 million, or $0.34 per share, for the same period in 2019. Weighted average common shares outstanding for the quarters ended December 31, 2020 and December 31, 2019, were 68,630,078 and 47,886,144, respectively.

Full Year 2020

- Collaboration revenue for the full year 2020 was approximately $0.8 million, compared to $42.1 million for the full year 2019. The decrease in collaboration revenue was primarily a result of the recognition of the remaining deferred revenue under the Takeda agreements of $40.0 million in 2019.
- Research and development expenses for the full year 2020 were approximately $67.0 million, compared to $55.0 million for the full year 2019. The difference was primarily due to an increase in clinical and regulatory activities for UpRi and XMT-1592, and increase in manufacturing activities for UpRi, an increase in headcount and a non-cash increase in valuation of stock-based awards as a result of stock appreciation and an increase in manufacturing activities for preclinical programs. The increase was partially offset by a decrease in XMT-1592 preclinical development and manufacturing activities and discontinuation of XMT-1522.
- General and administrative expenses for the full year 2020 were approximately $21.9 million, compared to $17.3 million for the full year 2019, primarily due to an increase in consulting and professional fees, an increase in facility-related costs as a result of the extension of the Company's lease, and a non-cash increase in valuation of stock-based awards as a result of stock appreciation.

- Net loss for the full year 2020 was $88.0 million, or $1.43 per share, compared to net loss of $28.2 million, or $0.65 per share, for the full year 2019. Weighted average common shares outstanding for the periods ended December 31, 2020 and December 31, 2019, were 61,485,205 and 43,492,113, respectively.

Conference Call Details

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 2020 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 2354447. 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, upifitamab rilsodotin (UpRi), 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 XMT-1660, a Dolasynthen ADC targeting B7-H4, as well as XMT-2056, 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, the ability of the single-arm UPLIFT cohort to enable registration, and expectations regarding future clinical trial results based on data achieved to date, and the sufficiency of the Company's cash on hand. Forward-looking statements generally can be identified by terms such as "aims," "anticipates," "believes," "contemplates," "continues," "could," "estimates," "expects," "goal," "intends," "may," "on track," "opportunity," "plans," "poised for," "possible," "potential," "predicts," "projects," "promises to be," "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 or early clinical results may not be predictive of the results or success of ongoing or later preclinical or clinical studies, that the identification, development and testing of the Company's product candidates and new platforms will take longer and/or cost more than planned, and that our clinical studies may not be initiated or completed on schedule, if at all, as well as those listed in the Company's Annual Report on Form 10-K filed on February 26, 2021, with the Securities and Exchange Commission ("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.

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

	December 31, 2020	December 31, 2019
Cash, cash equivalents and marketable securities	$ 255,094	$ 99,790
Working capital[(1)]	228,577	77,256
Total assets	273,399	107,541
Total stockholders' equity	228,087	78,318

[(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		Year ended	
	December 31, 2020	December 31, 2019	December 31, 2020	December 31, 2019
Collaboration revenue	$ 10	$ 42	$ 828	$ 42,123
Operating expenses:				
Research and development	22,858	12,430	67,036	55,040
General and administrative	5,914	4,212	21,902	17,283
Total operating expenses	28,772	16,642	88,938	72,323
Total other income (expense), net	(82)	354	65	1,992
Net loss	$ (28,844)	$ (16,246)	$ (88,045)	$ (28,208)
Net loss per share attributable to common stockholders — basic and diluted	$ (0.42)	$ (0.34)	$ (1.43)	$ (0.65)
Weighted-average number of common shares used in net loss per share attributable to common stockholders — basic and diluted	68,630,078	47,886,144	61,485,205	43,492,113

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