Mersana Announces Third Quarter 2017 Financial Results and Provides Business Updates

Received FDA Clearance of IND Application for XMT-1536, a First-in-Class Dolaflexin® *Antibody Drug Conjugate Targeting NaPi2b*

XMT-1522 Phase 1 Trial Continues Enrollment of Patients with Advanced Tumors Expressing HER2

CAMBRIDGE, Mass., November 9, 2017 -- 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 proprietary Dolaflexin® platform, today reported business highlights and financial results for the quarter ended September 30, 2017.

“Since our last update, our ADC pipeline continues to make significant strides. We achieved an important milestone with the FDA clearance of an IND submission for our drug candidate XMT-1536, and continue to advance XMT-1522 in its Phase 1 dose escalation study,” said Anna Protopapas, President and CEO of Mersana Therapeutics. “With two important molecules in clinical development, we are making significant progress in realizing our vision of leveraging our innovative ADC platform to address significant unmet patient needs.”

Platform and Pipeline Highlights

XMT-1536: A first-in-class Dolaflexin ADC targeting NaPi2b-expressing tumors.

- Investigational New Drug (IND) application cleared by the U.S. Food and Drug Administration (FDA) to begin Phase 1 clinical trials of XMT-1536 as a first-in-class and potentially best-in-class ADC against the solid tumor antigen NaPi2b. XMT-1536 is an ADC utilizing a novel anti-NaPi2b targeted antibody together with our Dolaflexin platform and DolaLock technology. XMT-1536 is on track to begin Phase 1 dose escalation in patients in early 2018.
- Presented data from pre-clinical studies involving XMT-1536 at the AACR-NCI-EORTC International Conference on Molecular Targets and Cancer Therapeutics meeting in Philadelphia. The data in the presentation suggested that XMT-1536 could be broadly active in ovarian cancer. The study revealed that XMT-1536 induced at least a 50% tumor regression in 10/19 (53%) primary patient-derived ovarian cancer xenograft models that were selected for testing without prior knowledge of NaPi2b expression status.

XMT-1522: A Dolaflexin-based HER2-targeted ADC targeting tumors not addressed by currently approved HER2 therapies.

- Continued enrollment of the Phase 1 dose escalation study of XMT-1522 in patients with advanced tumors expressing HER2, including breast cancer, non-small-cell-lung-cancer (NSCLC) and gastric cancer. The study will continue dose escalation until the Maximum Tolerated Dose (MTD) is reached, with interim safety results expected around the end of 2017.

Recent Corporate Highlights

- In July 2017, Mersana completed its initial public offering, raising approximately $75.0 million in gross proceeds through the sale of 5 million shares of its common stock at an offering price of $15.00 per share.
- Continued the evolution of our Board of Directors with the addition of Lawrence Alleva, a former partner with PricewaterhouseCoopers LLP (PwC) and an experienced public company board member. He chairs the Audit Committee and is a member of our Nominating and Corporate Governance Committee.

Third Quarter 2017 Financial Results

- Cash, cash equivalents and marketable securities as of September 30, 2017 were $133.4 million, compared with $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.
- Collaboration revenue for the quarter was approximately $6.3 million, compared to $3.3 million for the same period in 2016. The net increase was largely the result of a change in estimates of the costs to complete our obligations under our partner agreements.
- Research and development expenses for the quarter were approximately $11.4 million, compared to $7.6 million for the same period in 2016. The increase was primarily due to additional personnel and external costs associated with continued clinical development of the Company's lead program XMT-1522 and IND-enabling studies and manufacturing activities associated with its second program, XMT-1536.
- General and administrative expenses for the quarter were approximately $2.9 million, compared to $1.6 million for the same period in 2016. The increase was primarily due to additional personnel expense as the Company builds the infrastructure to support the growth of research and development organization and increased professional fees as the Company began to operate as a publicly traded company.
- Net loss for the quarter was $7.7 million, or $0.35 per share, compared to a net loss of $5.8 million, or $4.56 per share, for the same period in 2016. Weighted average common shares outstanding for the periods ended September 30, 2017 and 2016, were 22,242,129 and 1,279,383, respectively. Shares outstanding for the three months ended September 30, 2017 included common shares issued upon the conversion of all outstanding convertible preferred shares and common shares issued in connection with the Company's IPO.

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 I clinical trials in patients with advanced tumors expressing HER2, including breast cancer, non-small-cell-lung-cancer (NSCLC) and gastric cancer patients. The Company expects to begin dosing patients with its second product candidate, XMT-1536, in early 2018. In addition, multiple partners are using Mersana's leading platform to advance their ADC pipelines.

Cautionary Note Regarding 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 possible or assumed timing of the Company's clinical trials, business strategies and financing plans.

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 presentation. 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 August 11, 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 our Quarterly Report on Form 10-Q and our 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)

	September 30, 2017	December 31, 2016
Cash, cash equivalents and marketable securities	$ 133,378	$ 100,297
Working capital (1)	112,212	73,787
Total Assets	142,916	105,087
Convertible preferred stock	-	94,450
Total stockholders' equity (deficit)	83,642	(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.

Condensed Consolidated Statement of Operations

(in thousands, except share and per share data)

(unaudited)

	Three months ended		Nine months ended	
	September 30, 2017	September 30, 2016	September 30, 2017	September 30, 2016
Collaboration revenue	$ 6,267	$ 3,262	$ 14,284	$ 13,175
Operating expenses:				
Research and development	11,412	7,555	32,145	23,163
General and administrative	2,905	1,598	7,406	5,044
Total operating expenses	14,317	9,153	39,551	28,207
Other income	318	54	527	73
Net loss	$ (7,732)	$ (5,837)	$ (24,740)	$ (14,959)
Net loss per share attributable to common stockholders — basic and diluted	$ (0.35)	$ (4.56)	$ (2.94)	$ (11.72)
Weighted-average number of common shares used in net loss per share attributable to common stockholders — basic and diluted	22,242,129	1,279,383	8,407,541	1,276,819

Contacts

Media Contact
Mersana Therapeutics, Inc.
Paul Kidwell, 617-680-1088
paulkidwell@mersana.com

or

Investors Contact
Stern Investor Relations, Inc.
Christina Tartaglia, 212-362-1200
christina@sternir.com