

Mersana Therapeutics Presents Preclinical Data from its Innovative Dolasynthen and Immunosynthen ADC Platforms at American Association for Cancer Research 2020 Virtual Annual Meeting

June 22, 2020

- Preclinical data on XMT-1592, a NaPi2b-targeted site-specific and homogeneous Dolasynthen ADC, demonstrate excellent activity, tolerability and pharmacokinetics
- Preclinical data on multiple Immunosynthen STING-agonist ADCs show complete tumor regressions after a single dose, excellent tolerability and immune memory

CAMBRIDGE, Mass., June 22, 2020 (GLOBE NEWSWIRE) -- 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 presented preclinical data for XMT-1592, its clinical stage Dolasynthen ADC targeting NaPi2b, as well as progress on its Immunosynthen STING-agonist ADC platform at the American Association for Cancer Research (AACR) 2020 Virtual Annual Meeting.

"The advancement of XMT-1592 is another example of our commitment to innovation in the ADC field and to extending our leadership in NaPi2btargeted therapy. The ongoing Phase 1 study aims to clinically validate the advantages represented by the preclinical data shown in the AACR poster," said Timothy B. Lowinger, Ph.D., Chief Science and Technology Officer of Mersana Therapeutics. "With Immunosynthen, we are leveraging our expertise to extend the benefits of ADCs into the realm of immuno-oncology with the aim of stimulating the innate immune system in a targeted, safe and effective manner. These data demonstrate that across multiple targets, antibodies and pre-clinical models, the Immunosynthen STING-agonist ADC platform delivers robust, target-dependent anti-tumor effects at well-tolerated doses and induces tumor-specific immune memory and other hallmarks of immune activation. We remain on track to select our first Immunosynthen STING-agonist ADC development candidate in the second half of 2020."

"We've made significant progress with our differentiated Dolasynthen and Immunosynthen ADC platforms to advance our pipeline," said Anna Protopapas, President and Chief Executive Officer of Mersana Therapeutics. "These novel platforms, together with our clinically validated Dolaflexin platform, represent significant breakthroughs in the ADC field. Our vision is to continue to leverage these platforms to deliver meaningful therapies to patients in need."

Details of the posters are as follows:

Poster Title: XMT-1592, a Site-Specific Dolasynthen-Based NaPi2b-Targeted Antibody-Drug Conjugate for the Treatment of Ovarian Cancer and Lung Adenocarcinoma

Poster Number: 2894

Date: June 22, 2020 at 9:00 a.m. ET and on demand

Session Type: Poster Session

XMT-1592 is an ADC created using Dolasynthen, Mersana's proprietary, customizable and homogeneous platform designed to precisely optimize an ADC for a given target, drug-to-antibody ratio (DAR) and antibody. XMT-1592 is currently in an ongoing Phase 1 dose escalation study to determine the maximum tolerated dose (MTD) in patients with non-small cell lung cancer (NSCLC) adenocarcinoma and ovarian cancer. This poster evaluates the benefits of site-specific bioconjugation of Dolasynthen by reporting *in vitro* and *in vivo* comparisons of XMT-1592 to a stochastically conjugated version of the ADC. XMT-1592 shows improved *in vivo* activity, pharmacokinetics and clinical pathology relative to its stochastic counterpart. These data also show that XMT-1592 induced sustained tumor regressions in an NSCLC adenocarcinoma patient-derived xenograft.

Poster Title: Systemic Administration of STING-Agonist Antibody-Drug Conjugates Elicit Potent Anti-Tumor Immune Responses with Minimal Induction of Circulating Cytokines

Poster Number: 6706

Date: June 22, 2020 at 9:00 a.m. and on demand

Session Type: Poster Session

These data presented today show that Immunosynthen represents a novel STING-agonist ADC platform for the systemic administration of a therapeutic agent with targeted immune-stimulatory effects. These data show target-dependent anti-tumor immune responses *in vitro* and *in vivo* as a single well-tolerated dose for multiple targets in multiple preclinical models. The data also show that the STING-agonist ADC was more active (over 100-fold increased potency) with limited induction of systemic cytokines when compared to intravenously administered unconjugated (free) agonist, suggesting it may confer an improved therapeutic index. In addition, potent ADC-mediated tumor regression led to durable immunological memory in an immune competent model.

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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Source: Mersana Therapeutics, Inc.