

Mersana Therapeutics Presents Preclinical Data on XMT-1522 Supporting Efficacy and Tolerability

April 2, 2017

Cambridge, Mass., April 2, 2017 - Mersana Therapeutics, Inc., a clinical-stage biotechnology company focused on discovering and developing a pipeline of antibody drug conjugates (ADCs) based on its proprietary Fleximer® technology, today presented data that highlighted the company's emerging antibody drug conjugate (ADC) XMT-1522 at the 2017 American Association for Cancer Research annual meeting in Washington, D.C., April 1-5. The two poster presentations were titled: "Non-clinical pharmacokinetics of XMT-1522, a HER2 targeting auristatin-based antibody drug conjugate" and "Combination of the anti-HER2 ADC XMT-1522 and the checkpoint inhibitor pembrolizumab for treatment of NSCLC in preclinical models"

In a poster session on Sunday, April 2, "Non-clinical pharmacokinetics of XMT-1522, a HER2 targeting auristatin-based antibody drug conjugate," Mersana scientists confirmed that the small molecule Auristatin F – HPA (XMT-1267), which has the capacity for bystander effect is a primary ADC drug release product. XMT-1267 is further metabolized in the tumor to form Auristatin F (XMT-1521), the most abundant XMT-1267 metabolite. XMT-1521, which is negatively charged and not freely cell permeable, is observed in the tumor at significant levels two weeks post-administration of XMT-1522, supporting a trapping effect of this active metabolite. XMT-1522 is Mersana's lead ADC compound, and is being developed for the treatment of patients with HER2-positive cancers, as well as for patients with HER2-expressing tumors not meeting the current diagnostic definition of HER2-positive.

The second poster presentation, presented in a session on Monday, April 3, demonstrated in pre-clinical models that XMT-1522 and its active release product, XMT-1267, can lead to immunogenic cell death. The potential for XMT-1522 to have monotherapy activity in HER2-expressing NSCLC, as well as a rationale for combinations of XMT-1522 and immunomodulatory therapies in NSCLC, was also reported.

"The pre-clinical support for the potential benefit to patients of XMT-1522 continues to strengthen and we are excited to have initiated clinical development for the program," said Anna Protopapas, President and Chief Executive Officer of Mersana. "The presentations at AACR highlight the progress we have made with our lead antibody drug conjugate, XMT-1522, as an ADC-based therapy, but also in the important field of immuno-oncology, where the data suggests the compound's potential as a monotherapy in HER2-expressing non-small-cell lung cancer (NSCLC), as well as in combination with immunomodulatory therapies in NSCLC."

"Our presentation in immuno-oncology strongly suggests that XMT-1522 and its active release molecule, XMT-1267, lead to immunogenic cell death, and can significantly enhance the effect of immuno-oncology agents such as checkpoint inhibitors," said Timothy B. Lowinger, Ph.D., Chief Scientific Officer of Mersana Therapeutics. "The second presentation demonstrates Mersana's deeper understanding of XMT-1522's drug metabolism and pharmacokinetic (DMPK) properties, which support the potential of Mersana's Dolaflexin ADC platform to provide a greater therapeutic index by simultaneously improving efficacy, via greater payload delivery, and tolerability due to the unique pharmacology designed into our novel auristatin payload."

About Mersana Therapeutics

Mersana Therapeutics is a clinical-stage biotechnology company with highly differentiated and proprietary antibody drug conjugate, or ADC, platforms that allow for significantly higher drug loads, with the potential to provide greater efficacy while simultaneously increasing tolerability. As a result, our platforms create expanded opportunities to deliver meaningful clinical benefit to patients. Our lead product candidate, XMT1522, is in Phase I clinical trials. We expect that our second product candidate, XMT1536, will be entering clinical trials in early 2018. In addition, our partners are advancing their pipeline of ADCs using our platform.

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