Mersana Therapeutics' New Immunoconjugate Demonstrates Anti-Cancer Activity in Non-Small Cell Lung Cancer and Ovarian Cancer Tumor Models

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XMT-1536 to be developed for the treatment of patients with NaPi2b-expressing tumors

CAMBRIDGE, Mass., April 18, 2016 -- Mersana Therapeutics, Inc. today announced that preclinical data for its new immunoconjugate product candidate, XMT-1536, demonstrated significant anti-cancer activity in non-small cell lung cancer (NSCLC) and ovarian cancer tumor models. The data were presented today during a poster session at the 2016 American Association for Cancer Research (AACR) Annual Meeting in New Orleans, LA.

XMT-1536 is a highly potent anti-sodium-dependent phosphate transport protein 2B (anti-NaPi2b) immunoconjugate comprised of an average of 15 auristatin molecules conjugated to XMT-1535, a novel humanized anti-NaPi2b antibody, via the Dolaflexin™ antibody-drug conjugate (ADC) platform. Dolaflexin is one of Mersana's proprietary Fleximer® immunoconjugate platforms.

"We are encouraged by the durable regressions XMT-1536 achieved in non-small cell lung cancer and ovarian cancer tumor models, as well as the excellent tolerability and pharmacokinetics in non-human primate exploratory toxicology studies," said Donald A. Bergstrom, MD, PhD, Chief Medical Officer of Mersana. "Based on these data, we are advancing XMT-1536 into IND-enabling studies for the treatment of patients with NaPi2b-expressing tumors."

The study evaluated XMT-1536 in non-squamous NSCLC and non-mucinous ovarian cancer tumor models, indications in which NaPi2b is highly expressed. XMT-1536 demonstrated significant efficacy in all four patient-derived xenograft models representative of the target patient populations. In three patient-derived models of NSCLC, including KRAS-mutant NSCLC, XMT-1536 induced tumor regressions after three weekly doses of 3 mg/kg. In an ovarian cancer xenograft model, XMT-1536 induced partial tumor regressions after a single dose of 3 mg/kg, and complete tumor regressions after a single dose of 5 mg/kg or three weekly doses of 3 mg/kg. XMT-1536 was well-tolerated with no evidence of bone marrow toxicity in non-human primates at up to seven times the dose associated with tumor regression in the mouse xenograft models.

"XMT-1536 further validates the ability of Mersana's Fleximer platform to generate targeted therapies that have the potential to address unmet needs and improve outcomes for patients with cancer. While there have been recent advancements in the treatment of non-small cell lung cancer and ovarian cancer, there remains tremendous need to address the significant proportion of patients who do not derive full benefit from currently available treatments," said Anna Protopapas, President and Chief Executive Officer of Mersana. "We look forward to the continued development of this second product candidate in our growing pipeline of Fleximer-based immunoconjugate therapies, as we prepare to enter the clinic with XMT-1522 this year."

About Mersana Therapeutics
Mersana Therapeutics is advancing a proprietary pipeline of targeted oncology therapeutics leveraging its game-changing Fleximer® immunoconjugate technology. Mersana's product candidates XMT-1522 and XMT-1536 have the potential to address significant unmet needs and improve patient outcomes in multiple oncology indications. Fleximer-based immunoconjugate molecules have been shown to have superior efficacy, including with targets previously considered not amenable to antibody-drug conjugate approaches. Mersana has collaborations utilizing Fleximer technology with Takeda, Merck KGaA, and Asana BioSciences. For more information, please visit www.mersana.com.

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