

Mersana Therapeutics Publishes Review Article Detailing Advantages of its Lead Cancer Compound in Journal of Advanced Drug Delivery Reviews

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– Fleximer® Conjugate XMT-1001 Demonstrates Prolonged Stable Disease Without Severe Side Effects Associated with Camptothecin or Irinotecan –

CAMBRIDGE, MASS. – NOVEMBER 12, 2009 – Mersana Therapeutics, a platform-based cancer therapeutics company, announced today that a review of the Company's lead compound, XMT-1001, will appear in the November 12, 2009 special issue of *Advanced Drug Delivery Reviews on Polymer Therapeutics: Clinical Applications and Challenges for Development*. The review article, entitled, "XMT-1001, a novel polymeric camptothecin pro-drug in clinical development for patients with advanced cancer," was authored by Alexander V. Yurkovetskiy, Ph.D., and Robert J. Fram, M.D., both of Mersana, and provided an overview of XMT-1001 in the context of other topoisomerase I inhibitors conjugated to polymers or encapsulated in liposomes.

XMT-1001 is a conjugate of the broad-spectrum cytotoxic camptothecin (CPT) that employs Mersana's Fleximer® platform. XMT-1001 is currently in a Phase 1 trial in patients with advanced solid tumors. Non-Fleximer-linked CPT was shown to be active in prior clinical studies conducted by the National Cancer Institute (NCI), but was discontinued due to severe bladder toxicity. The XMT-1001 program significantly improves on the clinically active drug, providing broad-spectrum activity with potentially better efficacy and safety.

According to the review, XMT-1001 demonstrated an improved therapeutic window compared to CPT or irinotecan in human tumor xenograft studies. The review also reports that XMT-1001, unlike many other conjugated CPT analogs, provides a slow and sustained systemic release of well defined drug products, enabling drug delivery to tumor, both in low molecular weight and in macromolecular forms. This dual-release mechanism of XMT-1001 may result in lower levels of CPT in the urine and less bladder toxicity, a serious dose-limiting toxicity associated with CPT and CPT conjugated to other polymers.

Preliminary data from the ongoing Phase 1 trial of XMT-1001 support these findings, revealing favorable pharmacokinetics, safety, and potential for therapeutic activity, demonstrated by multiple heavily pre-treated patients with advanced cancer exhibiting prolonged stable disease at non-myelosuppressive doses of XMT-1001. To date, XMT-1001 has not caused severe diarrhea or hemorrhagic cystitis, serious side effects associated with non-linked CPT or irinotecan.

"This review article once again demonstrates the unique advantages of linking Fleximer to cancer compounds. Specifically, Mersana's development of a CPT-conjugated drug with a dual-release mechanism could potentially address both the bladder and gastrointestinal toxicities that have previously been a concern with these drugs, while also potentially enhancing efficacy," said Julie Olson, Ph.D., CEO of Mersana. "Mersana has made solid

progress over the last year, as XMT-1001 moves through Phase 1 and we prepare to advance our second candidate, XMT-1107, into the clinic. We're encouraged by the attention our Fleximer® technology is garnering for its ability to be chemically linked to small molecules and biologics such as siRNA and peptide therapeutics to transform existing and experimental anti-cancer agents into new, patentable drugs with superior pharmaceutical properties. We look forward to continuing to advance existing and new compounds in the coming year."

About Mersana Therapeutics, Inc.

Mersana Therapeutics employs its biodegradable polymer platform (Fleximer®) to create new and better medicines. We are advancing our own clinical-stage pipeline of novel compounds with the potential to address multiple oncology indications. We also leverage the versatility of Fleximer through partnerships to overcome the safety, efficacy, and delivery challenges of nucleic acids, biologics, and small molecules in numerous therapeutic areas. For more information, visit www.mersana.com.

About Fleximer®

Fleximer is a novel, biodegradable and bio-inert polymer that can be chemically linked to small molecules, biologics and nucleic acids to enhance their pharmacokinetics and safety, potentially transforming existing and experimental agents into new, patentable drugs with superior properties. The Fleximer platform has broad and versatile applications across therapeutic categories and for enhancing the delivery of all types of therapeutics. Mersana's internal pipeline was generated with the Fleximer platform.

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