Appendix Figure 3

Deal Overview: *August 8th, 2022,* GSK enters into an exclusive option to license and co-develop Mersana Therapeutics' XMT-2056, an Immunosynthen ADC Targeting HER2

Deal Value: $100 Upfront, and up to $1.36B in Milestones

Key Data Generated: Despite the already unique MoA of ADCs, Mersana's XMT-2056 takes a further differentiated approach in that its payload activates a stimulator of interferon genes (STING), in order to activate the immune system. XMT-2056 utilizes the targeting ability of an ADC to elicit an immune response in both tumor cells as well as inter tumoral immune cells.

In preclinical models, XMT-2056 demonstrated robust anti-tumor activity as both a mono and combination therapy. As a monotherapy, XMT-2056 was effective in reducing tumor volume in both HER2-high and HER2-low-expressing models. Furthermore, in mouse models, XMT-2056 monotherapy led to sustained tumor regressions in comparison to the control IV STING agonist, which did not show strong efficacy even when dosed at 100x higher than the ADC. XMT-2056 was further differentiated for its ability to activate the STING pathway in both tumor-resident immune cells and tumor cells. As a combination therapy, XMT-2056 was tested with multiple approved agents, including trastuzumab, pertuzumab, anti-PD-1s, and trastuzumab deruxtecan. Furthermore, preclinical data also suggests that XMTY-2056 may enable immunological memory for prolonged anti-tumor activity. The safety profile of XMT-2056 was evaluated in non-human primates, where it showed favorable pharmacokinetics at a dose 10x greater than needed for tumor regression in mouse models.

Following the transaction, Mersana expects to initiate a basket Phase-1 trial in HER2-expressing tumors such as breast, gastric and non-small-cell lung cancers. XMT-2056 was additionally granted orphan drug designation for the treatment of gastric cancers.