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A Phase I study of GM103 administered via intratumoral injection in patients with locally advanced, unresectable, refractory and/or metastatic solid tumors

GeneMedicine Co., Ltd.

ONCOLOGY | Phase 1

Product Type	Gene & Nucleic acids
Indication	Ovarian Cancer, Breast Cancer (TNBC)
Target	Locally advanced, unresectable, refractory and/or metastatic solid tumors
MoA(Mechanism of Action)	GM103 is a replication-competent oncolytic adenovirus selectively engineered to replicate in cancer cells while sparing normal cells. Tumor-specific replication leads to direct oncolysis and lateral viral spread within solid tumors. Concurrent expression of therapeutic genes (e.g., IL-12, shVEGF) enhances intratumoral immune activation by promoting Th1 differentiation and increasing NK cell and cytotoxic T-cell activity, while simultaneously inhibiting tumor angiogenesis. As a result, GM103 induces strong, tumor-selective cytotoxicity and a robust systemic antitumor immune response, demonstrates efficacy even in tumors with high burden, and shows synergistic antitumor effects when combined with immune checkpoint inhibitors.
Competitiveness	GeneMedicine oncolytic adenovirus offers several advantages over competitor products; (1)higher level of virus accumulation and localization in tumor tissues (2)lower off-target systemic exposure, ultimately exerting potent therapeutic effect with minimal systemic toxicity (3)GM103 has potent cancer cell killing effect and tumor selectivity compared to competitor oncolytic virus Our pipeline can effectively treat wide range of tumor types, and injectable visceral tumors that have spread to the liver, such as metastases from colorectal and lung cancer. GeneMedicine has 4 potent anti-cancer drugs in our pipelines (GM101, 102, 103, 104). Delivery platform for any oncolytic viruses that best-in-class oncolytic adenoviral delivery platform with flexibility to deliver bespoke oncolytic virus therapies for various tumor indications.
Development Stage	Phase 1
Route of Administration	Intratumoral injection