

Study on the deriving of oHSV-1 candidate for an immunotherapeutic targeting to the ovarian cancer

Gencellmed Inc.

Disease area	Cancer
Product Type	Oncolytic herpes simplex virus 1
Indication	Ovarian cancer
Target	Epithelial Cell Adhesion Molecule (EpCAM)
Mechanism of Action	<ul style="list-style-type: none"> • Specific-targeting to tumor-associated antigens (TAAs) by binding to the bi-specific adapter and the chimeric gH (Cancer cell-specific infection) • Induction of a systemic anticancer effect by boosting the immune system through cytokines directly expressed from oHSV • Cancer-selective viral genome replication (pTERT-ICP6) and neurovirulence-deficiency (LAT deletion and UL56 gene truncation)

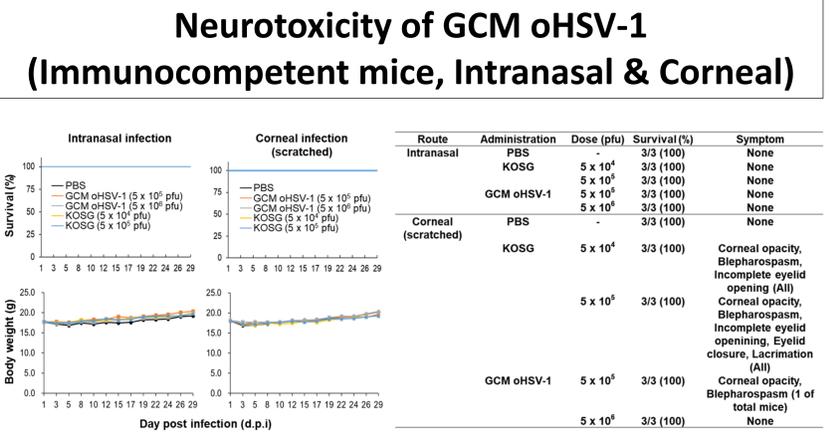
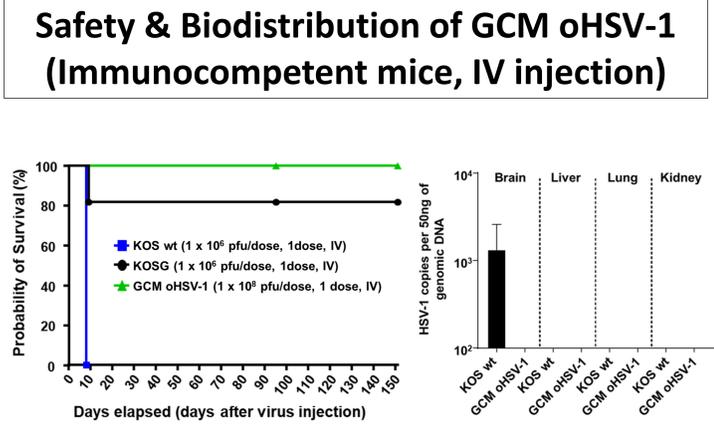
Competitiveness	<ul style="list-style-type: none"> • Most competitor products in clinical trials are attenuated to various degrees, obtaining cancer specificity through attenuation. A potential drawback of these attenuated oHSVs is their less efficient replication, leading to lower viral production. In sharp contrast, GCM oHSV-1 has been developed to retarget HSV tropism to EpCAM while preserving full lytic potential. • GCM oHSV-1 exclusively infects EpCAM-expressing cells, selectively replicating in cancer cells and avoiding replication in normal cells, ensuring high level of safety. • In addition, the insertion of cytokine genes induces a robust systemic antitumor immune response.
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Development Stage	Pre-clinical
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Route of Administration	Intratumoral, intravenous, and intraperitoneal administration
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Key Data	<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p style="text-align: center;">Anti-tumoral efficacy of GCM oHSV-1 (CDX IP tumor model, IP administration)</p> </div> <div style="width: 48%;"> <p style="text-align: center;">Abscopal Effect of GCM oHSV-1 by Immune Activation (Syngeneic mouse model, IT administration)</p> </div> </div>
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Safety & Biodistribution of GCM oHSV-1 (Immunocompetent mice, IV injection)	Neurotoxicity of GCM oHSV-1 (Immunocompetent mice, Intranasal & Corneal)
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IP	<ul style="list-style-type: none"> • Patent No. 10-2311895 / Korea • Patent No. 11,421,017 / United States 	<ul style="list-style-type: none"> • Patent No. 10-2405246 / Korea • Patent No. 10-2418528 / Korea 	<ul style="list-style-type: none"> • Patent No. 7460850 / Japan
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