## GCM-101: Development of cancer-immunotherapy with oncolytic herpes simplex virus (oHSV) in ovarian cancer



ONCOLOGY	Lead
Product Type	Oncolytic Herpes Simplex Virus type 1(oHSV-1), genetically engineered HSV-1
Indication	Ovarian cancer (Relapsed, refractory, recurrent and metastatic)
Target	Epithelial Cell Adhesion Molecule (EpCAM)
MoA(Mechanism of Action)	<ul> <li>Local attack against cancer: double-targeting by combination of adapter and engineering the viral envelop protein for binding efficiency to cancer cells</li> <li>Systemic activation of immune cells by delivering cytokine genes to the disease region</li> <li>Selective-replication of the virus with hTERT-ICP6 only in cancer cells</li> <li>Lack of viral pathogenicity and neuroinvasiveness by deletion of UL56 and LAT</li> <li>Avoidance of pre-existing neutralizing Abs to HSV-1</li> </ul>
Competitiveness	<ul> <li>Most competitor products in clinical trials are attenuated to a varying degree and gain their cancer specificity from the attenuation. One potential drawback of these attenuated oHSVs is that they replicate less efficiently, with lower viral production. In sharp contrast, GCM-101 developed to retarget HSV tropism to EpCAM while maintaining the fully lytic potential</li> <li>Because GCM-101 infect no other cell than the EpCAM-expressing cells, they promise to be highly safe</li> <li>In addition, the insertion of 3 cytokines induces a robust systemic antitumor immune response</li> </ul>
<b>Development Stage</b>	Lead
Route of Administration	Intratumoral, intravenous, and intraperitoneal injection

