

China's ImmVira partners with Roche for cancer therapy

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ImmVira enters clinical development in combination therapy of MVR-T3011 IT and MEK inhibitor in the US



China-based startup ImmVira has reached a cooperation agreement with Roche to establish clinical research partnership recently, to conduct clinical studies in the US on the combination therapy of ImmVira's MVR-T3011 IT and Roche's MEK inhibitor cobimetinib, to evaluate the safety and efficacy of this combo strategy.

MVR-T3011, ImmVira's proprietary 3-in-1 oncolytic herpes simplex virus (oHSV), is a novel genetically engineered oHSV which aims to achieve the most favorable profile of attenuated HSV-1 with replication potency in tumor cells. The incorporation of two latest and well-validated exogenous genes, PD-1 antibody and IL-12, further enhances immune responses in the tumor microenvironment.

MVR-T3011 IT clinical trials started in 2020 and are currently in Phase II in both the U.S. and China. Single agent treatment has demonstrated good safety profile and preliminary efficacy results.

In 2021, ImmVira research group published a scientific paper, *"Enhancing Therapeutic Efficacy of Oncolytic Herpes Simplex Virus with MEK Inhibitor Trametinib in Some BRAF or KRAS-Mutated Colorectal or Lung Carcinoma Models"*. *In vitro* and *in vivo* anti-tumor studies showed that, treatment with MEKi augmented oHSV oncolytic activity in BRAF V600E-mutated tumor cells and the combination treatment enhanced virus replication mediated by down-regulation of STAT1 and PKR expression or phosphorylation in BRAF V600E-mutated tumor cells as well as BRAF wt/KRAS-mutated tumor cells. Furthermore, a significant synergistic therapeutic efficacy was shown *in vivo* for BRAF wt/KRAS-mutated tumor models, when a combination of MEK inhibition and oHSV expressing PD-1 blockade antibody and IL-12.