547 CERPASS: A RANDOMIZED, CONTROLLED, OPEN-LABEL, PHASE 2 STUDY OF CEMIPLIMAB ± RP1 IN PATIENTS WITH ADVANCED CUTANEOUS SQUAMOUS CELL CARCINOMA

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Background The prognosis for advanced and metastatic cutaneous squamous cell carcinoma (CSCC) remains poor for many patients with the disease despite approval of the anti-PD1 antibodies cemiplimab and pembrolizumab.[1 2] RP1 is an oncolytic virus (HSV-1) that expresses a fusogenic glycoprotein (GALV-GP R-) and granulocyte macrophage colony stimulating factor (GM-CSF). In preclinical studies, RP1 induced immunogenic tumor cell death and provided potent systemic antitumor activity, which is further improved by combining anti-PD-1 therapy.[3] Preliminary results from IGNYTE, a phase I/II clinical study of RP1 in combination with nivolumab showed a high rate of deep and durable responses in patients (pts) with CSCC.[4] The objective of this trial is to evaluate the safety and efficacy of cemiplimab + RP1 versus cemiplimab alone in advanced CSCC.

Methods This global, multicenter, randomized phase 2 study is enrolling pts with metastatic or unresectable, locally advanced CSCC who are not candidates for/refuse surgery and/or radiotherapy. Key eligibility criteria include no prior treatment with anti-PD1/PD-L1 antibodies or oncolytic viruses. The clinical trial will enroll approximately 180 pts from centers in the EU, Australia, Canada and USA. Pts will be randomized in a 2:1 ratio favoring the RP1 + cemiplimab arm. Pts will receive 350 mg of cemiplimab intravenously (IV) Q3W for up to 108 weeks. In the RP1 + cemiplimab arm, RP1 will be injected intratumorally at a starting RP1 dose of 1 × 10^6 plaque forming units (PFU)/mL alone, followed by up to 7 doses of RP1 at 1 × 10^7 PFU/mL Q3W together with cemiplimab. Pts in the combination arm may receive up to 8 additional RP1 doses. No crossover will be allowed. Pts will be stratified by disease status and prior systemic therapy. Tumor assessments will be performed every 9 weeks. Primary endpoints are overall response rate and complete response rate by blinded independent review. Secondary endpoints include safety, progression free survival, duration of response and overall survival. Exploratory endpoints include viral shedding and biodistribution, and immune biomarker analyses. This trial is currently enrolling pts.

Trial Registration NCT04050436

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Ethics Approval The study was approved by institutional review board or the local ethics committee at each site. Informed consent was obtained from patients before participating into the trial.

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