

Tislelizumab Plus Chemotherapy as First-line Treatment for Unresectable, Locally Advanced Recurrent/Metastatic Esophageal Squamous Cell Carcinoma

Harry Yoon¹, Ken Kato², Richard Hubner³, Eric Raymond⁴, Aiyang Tao⁵, Sumei Liu⁶, Ibrahim Qazi⁵, Jianming Xu⁷

¹Mayo Clinic, Rochester, MN, USA; ²National Cancer Center Hospital, Tokyo, Japan; ³Christie NHS Foundation Trust, Manchester, UK; ⁴Centre Hospitalier Paris Saint-Joseph, Paris, France; ⁵BeiGene USA, Inc., San Mateo, CA, USA; ⁶BeiGene (Beijing) Co., Ltd., Beijing, China; ⁷The Fifth Medical Center, People's Liberation Army General Hospital, Beijing, China

Background Esophageal squamous cell carcinoma (ESCC) is the predominant histological subtype of esophageal cancer, particularly in Asian countries. Inhibition of the PD-1/PD-L1 axis has demonstrated antitumor activity in patients with advanced unresectable or metastatic ESCC. Tislelizumab, an investigational humanized IgG4 monoclonal antibody with high affinity and binding specificity for PD-1, was engineered to minimize binding to FcγR on macrophages in order to abrogate antibody-dependent phagocytosis, a mechanism of T-cell clearance and potential resistance to anti-PD-1 therapy. Results from early phase clinical studies suggest tislelizumab, as a single agent or in combination with chemotherapy, was generally well tolerated and had antitumor activity in patients with solid tumors, including ESCC.

Methods This global, phase 3, randomized, placebo-controlled, double-blind study (NCT03783442) is designed to evaluate the efficacy and safety of tislelizumab plus chemotherapy as first-line treatment of unresectable, locally advanced recurrent or metastatic ESCC. Adult patients with histologically confirmed unresectable ESCC, or locally advanced recurrent/metastatic disease with a ≥6 month treatment-free interval, are eligible; palliative radiation administered >4 weeks from study initiation is allowed. Patients who received prior anti-PD-(L)1, anti-PD-L2, or first-line therapy are ineligible. Patients (n≈480) will be randomized 1:1 to receive tislelizumab 200 mg IV every 3 weeks (Q3W) plus investigator-chosen chemotherapy (ICC) or placebo plus ICC. ICC options include: platinum (plat; cisplatin 60-80 mg/m² or oxaliplatin 130 mg/m² IV Q3W) + 5-FU 750-800 mg/m² by continuous IV infusion over 24 hours for 5d Q3W; or plat + capecitabine 1000 mg/m² orally BID for 14d Q3W; or plat + paclitaxel 175 mg/m² IV Q3W. Progression-free and overall survival are primary endpoints; secondary endpoints include objective response rate, duration of response, and health-related quality of life. Safety will be assessed by monitoring adverse events, physical examinations, vital signs, and electrocardiograms. This study is actively enrolling.