Platinum-Containing Combination Chemotherapy With or Without Tislelizumab as First-line Therapy in Patients With Extensive-Stage Small Cell Lung Cancer: A Phase 3 Trial in Progress

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Background First-line (1L) standard-of-care (SoC) for patients with untreated extensive-stage small cell lung cancer (SCLC) is platinum (cisplatin or carboplatin) plus etoposide. Despite initial response rates of 60-70% in patients treated with platinum, the prognosis in these patients remains poor, with median overall survival of approximately 9-11 months and a 2-year survival rate of <5%. As such, there is a significant unmet clinical need for new agents that can be combined with established treatments. Tislelizumab, a monoclonal antibody with high affinity and specificity for programmed death protein-1 (PD-1), was engineered to minimize binding to FcγR on macrophages to abrogate antibody-dependent phagocytosis, a mechanism of T-cell clearance and potential resistance to anti-PD-1 therapy. In a phase 2 trial, tislelizumab in combination with chemotherapy demonstrated a manageable tolerability profile and improved clinical efficacy as 1L treatment for advanced non-small cell lung cancer. Building from these results, tislelizumab plus SoC is being evaluated as 1L treatment for extensive-stage SCLC in China.

Methods This randomized, double-blind, phase 3 study is designed to compare tislelizumab plus SoC with placebo plus SoC as 1L treatment for patients with extensive-stage SCLC. Approximately 364 patients across 50 sites in China will be randomized 1:1 during the induction phase to receive either tislelizumab (200 mg IV Q3W) or placebo (IV Q3W) in combination with SoC consisting of etoposide (100 mg/m² IV Days 1-3 of each 21-day cycle) and platinum (cisplatin 75 mg/m² IV Q3W or carboplatin AUC 5 IV Q3W) for four cycles. Maintenance consists of tislelizumab or placebo Q3W and will continue until disease progression, loss of clinical benefit, unacceptable toxicity, or withdrawal of informed consent. Investigator-assessed progression-free survival and overall survival in the intent-to-treat analysis set are the primary endpoints. Additional efficacy endpoints will include objective response rate, duration of response, disease control rate; quality of life outcomes and safety/tolerability will also be evaluated.