The Effects of Tislelizumab Treatment on the Health-Related Quality of Life of Non-Small Cell Lung Cancer Patients Who Progressed on a Prior Platinum-Containing Regimen

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Objectives: Anti-PD-1/L1 therapies have improved overall survival (OS) by 2-4 months versus docetaxel in patients with advanced non-small cell lung cancer (NSCLC) who progressed after receiving a platinum regimen. Tislelizumab, an anti-PD-1 antibody, has been tested as monotherapy in the RATIONALE (NCT03358875) trial, which found that tislelizumab prolonged OS (median OS difference 5.3 months in intent-to-treat population) as compared to docetaxel, improved progression-free survival (median 4.1 vs 2.6 months), as well as overall response rate (ORR difference = 14.9%). Here we report health-related quality of life (HRQoL) of patients receiving tislelizumab versus docetaxel in this clinical trial.

Methods: NSCLC patients in this open-label, multicenter, phase 3 study were randomized to either tislelizumab or docetaxel. HRQoL was measured using the QLQ-C30 global health status/quality of life score (GHS/QoL) from EORTC QLQC30 as well as the lung cancer specific subscales of the EORTC QLQ-LC13. Descriptive analysis for the GHS/QoL score was performed for baseline through cycle 10; changes from baseline to cycle 12 were examined for the symptom subscales.

Results: Eight hundred five patients were randomized to tislelizumab (n=535) or docetaxel (n=270). Patients were 77% male with an average age of 60 years (range 28-88 years). The compliance rates were mostly >98% and were similar across arms. The GHS/QoL score in the tislelizumab arm improved relative to baseline from cycles 5 through 10 while declining in cycles 6 through 10 in the docetaxel arm. The tislelizumab arm showed a reduction from baseline at cycle 12 in the symptom scores of coughing, chest pain, and dyspnea while patients in the docetaxel arm experienced an increase in symptoms.

Conclusions: The study results show that tislelizumab monotherapy improved HRQoL in patients who previously failed treatment with a platinum-containing chemotherapy; this is especially important as the NSCLC patients treated with tislelizumab not only experienced improvements in OS, but also reductions in their symptomology.