ELCC 2022 Abstract: Tacti-002 Part B

Results of a phase II study investigating eftilagimod alpha (soluble LAG-3 protein) and pembrolizumab in 2nd line PD-1/PD-L1 refractory metastatic non-small cell lung carcinoma pts

Short title: Phase II study of efti and pembrolizumab in 2nd line PD-1/PD-L1 refractory NSCLC

Purpose: Eftilagimod alpha (efti) is a soluble LAG-3 protein binding to a subset of MHC class II molecules to mediate antigen presenting cell (APC) and CD8 T-cell activation. Stimulating APCs and subsequent T cell recruitment with efti may revert PD-1 resistance. We hereby report results from part B, 2nd line PD-1/PD-L1 refractory non-small cell lung carcinoma (NSCLC), of the TACTI-002 trial.

Methods: Patients (pts) with previously treated metastatic NSCLC, refractory to PD-1/PD-L1 and unselected for PD-L1 expression were enrolled. A Simon's 2-stage design was used, with objective response rate (ORR) by iRECIST as the primary endpoint (EP). Secondary EPs include ORR by RECIST 1.1, tolerability, disease control rate (DCR), progression free survival and overall survival. Pts received 30 mg efti (SC) q2w for 8 cycles (1 cycle= 3 wks) and then q3w for up to one year together with pembrolizumab (200 mg IV q3w for up to 2 years). Imaging was performed every 8 weeks and evaluated locally. The study was approved by relevant authorities and ethics committees.

Results: 36 pts were enrolled in this cohort. Median age was 66 years (50-84) and 61 % were male. The ECOG PS was 0 and 1 in 33 % and 67 % of pts, respectively. Pts had squamous (19 %) and non-squamous (78 %) NSCLC. Pts were pretreated with a PD-1/ PD-L1 antagonist alone (33 %) or in combination with platinum-based chemo (67 %). All PD-L1 subgroups were included with 36 % being PD-L1 negative. Pts received a median 4.0 (range 1–18) pembrolizumab and 5.0 (range 1-22) efti administrations. 2 pts discontinued treatment due to adverse reactions (ARs) (5.6 %). The most common (>15 %) AEs were decreased appetite (33 %), dyspnea (31 %), cough (25 %), asthenia (22 %), fatigue (17 %) and weight decreased (17 %).

At data cut-off (Nov 2021) 36 pts were evaluated for response with a min. follow-up of ≥4 months. ORR (iRECIST) and DCR was 6 % (2/36) and 36 % (13/36), respectively. Both responses were reported in pts pre-treated with chemo + PD-1 and under therapy since 7+ and 12+ months at data cut-off.

Conclusions: Efti in combination with pembrolizumab is safe and shows encouraging signs of antitumor activity in PD-1 refractory 2nd line NSCLC pts.

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