AdvanTIG-105: Phase 1b Dose-Expansion Study of Ociperlimab plus Tislelizumab With Chemotherapy in Patients With Metastatic Squamous and Nonsquamous Non-Small Cell Lung Cancer

Authors: Yan Yu,[1] Dingzhi Huang,[2] Bo Gao,[3] Jun Zhao,[4] Yanping Hu,[5] Wu Zhuang,[6] Steven Kao,[7] Wen Xu,[8] Yu Yao,[9] Tsung-Ying Yang,[10] Youngjoo Lee,[11] Jin-Soo Kim,[12] Her-Shyoung Shiah,[13] Ruihua Wang,[14] Hao Zheng,[15] Wei Tan,[16] Rang Gao,[14] Hye Ryun Kim,[17] Shun Lu[18]

Affiliations: [1]Department of Internal Medical Oncology, The Third Affiliated Hospital of Harbin Medical University, Harbin, China; [2]Department of Thoracic Oncology, Tianjin Medical University Cancer Institute and Hospital, National Clinical Research Center for Cancer, Tianjin Key Laboratory of Cancer Prevention and Therapy, Tianjin's Clinical Research Center for Cancer, Tianjin, China; [3]Blacktown Cancer and Haematology Centre, Blacktown Hospital, Western Sydney Local Health District, Blacktown, New South Wales, Australia; [4]Key Laboratory of Carcinogenesis and Translational Research (Ministry of Education/Beijing), Department of Thoracic Medical Oncology, Peking University Cancer Hospital & Institute, Beijing, China; [5]Department of Thoracic Oncology, Hubei Cancer Hospital, Wuhan, China; [6]Department of Medical Oncology, Fujian Provincial Cancer Hospital, Fujian Medical University Cancer Hospital, Fuzhou, China; [7]Department of Medical Oncology, Chris O'Brien Lifehouse, Camperdown, New South Wales, Australia; [8]Division of Cancer Services, Princess Alexandra Hospital, Brisbane, Queensland, Australia; [9]Department of Oncology, First Hospital, Medical College, Xi'an Jiaotong University, Xi'an, China; [10]Division of Chest Medicine, Department of Internal Medicine, Taichung Veterans General Hospital, Taichung, Taiwan; [11]Department of Medical Oncology, National Cancer Center, Goyang, Korea; [12]Department of Internal Medicine, SMG-SNU Boramae Medical Center, Seoul, Korea; [13]Division of Hematology and Oncology, Department of Medicine, Taipei Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, New Taipei, Taiwan; [14]Clinical Development, BeiGene (Shanghai) Co., Ltd., Shanghai, China; [15]Biostatistics, BeiGene USA, Inc., San Mateo, CA, USA; [16]Clinical Biomarkers, BeiGene (Beijing) Co., Ltd., Beijing, China; [17]Division of Medical Oncology, Department of Internal Medicine, Yonsei Cancer Centre, Yonsei University College of Medicine, Seoul, Korea; [18]Shanghai Lung Tumor Clinical Medical Center, Shanghai Chest Hospital, Shanghai Jiao Tong University, Shanghai, China

Abstract:

Objectives: T-cell immunoreceptor with immunoglobulin and immunoreceptor tyrosine-based inhibitory motif domains (TIGIT) inhibitor plus an anti-programmed cell death protein 1 (PD-1) antibody is a promising combination which shows potent efficacy in solid tumors. AdvanTIG-105 is a phase 1/1b open-label study designed to assess the safety and preliminary antitumor activity of ociperlimab, an anti-TIGIT monoclonal antibody (mAb), plus tislelizumab, an anti-PD-1 mAb, in patients with metastatic unresectable solid tumors (NCT04047862). In the dose-escalation part, ociperlimab plus tislelizumab was well tolerated, preliminary efficacy was observed, and the recommended phase 2 dose (RP2D) of ociperlimab 900 mg intravenous (IV) every 3 weeks (Q3W) plus tislelizumab 200 mg IV Q3W was established. We report results from the dose-expansion (Cohorts 1 [C1] & 2 [C2]) of the AdvanTIG-105 study.

Methods: Treatment-naïve adult patients with histologically/cytologically confirmed metastatic squamous (C1) or nonsquamous with *EGFR/ALK/ROS-1* wild-type tumors (C2) non-small cell lung cancer (NSCLC) were enrolled. Patients in C1 received the RP2D of ociperlimab plus tislelizumab with paclitaxel/*nab*-paclitaxel plus carboplatin and patients in C2 received the RP2D of ociperlimab plus tislelizumab with pemetrexed plus cisplatin/carboplatin, both until disease progression, intolerable toxicity, or withdrawal of consent. The primary endpoint was investigator-assessed objective response rate (ORR) per RECIST v1.1. Secondary endpoints included safety.

Results: As of March 18, 2022, 84 patients were enrolled (C1: n=41; C2: n=43). The median study follow-up was 17.7 weeks (range 1.1-42.6) in C1 and 15.0 weeks (3.0-51.1) in C2. Of the 76 efficacy-evaluable patients, the confirmed ORR in C1 was 45.9% (95% confidence interval [CI]: 0.3, 0.6) and 25.6% (95% CI: 0.1, 0.4) in C2. In total, 81 patients (96.4%) experienced ≥1 treatment-emergent adverse event (TEAE), and 48 patients (57.1%) had ≥ grade 3 TEAEs. Serious TEAEs occurred in 26 patients (31.0%). The most common TEAEs were anemia (41.7%), decreased neutrophil count (33.3%), and decreased white blood cell count (33.3%).

Conclusions: The RP2D of ociperlimab 900 mg IV Q3W and tislelizumab 200 mg IV Q3W plus chemotherapy was generally well tolerated and showed antitumor activity in patients with treatment-naïve metastatic squamous/nonsquamous NSCLC.