

Authors: Rajiv Kumar,^{1*†} Se Hyun Kim,^{2*} DianSheng Zhong,^{3*} Shun Lu,⁴ Ying Cheng,⁵ EunKyung Cho,⁶ Tim Clay,⁷ Gyeong-Won Lee,⁸ Meili Sun,⁹ Byoung Yong Shim,¹⁰ David R. Spigel,¹¹ Tsung-Ying Yang,¹² Qiming Wang,¹³ Gee-Chen Chang,¹⁴ Guohua Yu,¹⁵ Rang Gao,¹⁶ Ruihua Wang,¹⁶ Hao Zheng,¹⁷ Xuerui Luo,¹⁶ Hye Ryun Kim¹⁸

Affiliations: ¹New Zealand Clinical Research, Christchurch, New Zealand and Department of Pathology, University of Otago, Dunedin, New Zealand; ²Division of Hematology and Medical Oncology, Department of Internal Medicine Seoul National University Bundang Hospital, Seoul National University College of Medicine, Seongnam, Korea; ³Department of Oncology, Tianjin Medical University General Hospital, Tianjin, China; ⁴Shanghai Lung Cancer Center, Shanghai Chest Hospital, Shanghai Jiao Tong University, Shanghai, China; ⁵Department of Thoracic Oncology, Jilin Cancer Hospital, Changchun, China; ⁶Gil Medical Center, Gachon University College of Medicine, Incheon, Korea; ⁷Department of Medical Oncology, St John of God Subaico Hospital, Western Australia, Australia; ⁸Division of Hematology and Oncology, Department of Internal Medicine, Gyeongsang National University Hospital, Gyeongsang National University College of Medicine, Jinju, Korea; ⁹Department of Oncology, Jinan Central Hospital Affiliated to Shandong University; Jinan Central Hospital Affiliated to Shandong First Medical University, Jinan, China; ¹⁰Department of Medical Oncology, Department of Internal Medicine, St. Vincent's Hospital, The Catholic University of Korea, Suwon, Korea; ¹¹Sarah Cannon Research Institute (SCRI)/ Tennessee Oncology, PLLC, Nashville, Tennessee, USA; ¹²Division of Chest Medicine, Department of Internal Medicine, Taichung Veterans General Hospital, Taichung, Taiwan; ¹³Department of Internal Medicine, Affiliated Cancer Hospital of Zhengzhou University, Henan Cancer Hospital, Zhengzhou, China; ¹⁴Division of Pulmonary Medicine, Department of Internal Medicine, Chung Shan Medical University Hospital, Taichung, Taiwan; ¹⁵Oncology Department, Weifang People's Hospital, Weifang Medical University, Weifang, China; ¹⁶BeiGene (Shanghai) Co., Ltd., Shanghai, China; ¹⁷BeiGene USA, Inc., San Mateo, CA, USA; ¹⁸Division of Medical Oncology, Department of Internal Medicine, Yonsei Cancer Centre, Yonsei University College of Medicine, Seoul, Korea

Abstract:

Introduction: Combination of anti-TIGIT/anti-PD-1 antibodies is a promising therapy for NSCLC. AdvanTIG-105 is a dose-escalation/-expansion study designed to assess the safety and preliminary antitumor activity of ociperlimab (investigational anti-TIGIT mAb) with tislelizumab (clinical-stage anti-PD-1 mAb) in patients with advanced, metastatic unresectable solid tumors (NCT04047862). Here, we report results from a dose-expansion cohort of AdvanTIG-105.

Methods: Treatment-naïve adult patients with histologically or cytologically confirmed metastatic squamous or nonsquamous NSCLC with PD-L1-positive (tumor cell [TC] $\geq 1\%$ by VENTANA PD-L1 [SP263] Assay) and nonsquamous patients with *EGFR/ALK/ROS-1* wild-type tumors were enrolled. Patients received the RP2D of ociperlimab 900mg IV Q3W plus tislelizumab 200mg IV Q3W until disease progression, intolerable toxicity, or withdrawal of consent. Primary endpoint was investigator-assessed ORR per RECIST v1.1.

Results: As of 5 April 2022, 40 patients (median age: 65.0 years [range 46–81]) were enrolled; median study follow-up was 28.1 weeks (range 3.1–61.7). Overall, ORR in the efficacy-evaluable set (N=39) was 53.8% (95% CI: 37.2, 69.9); DCR was 89.7% (95% CI: 75.8, 97.1). In patients with PD-L1 TC $\geq 50\%$ (n=14), ORR was 71.4% (95% CI: 41.9, 91.6), and 44.0% (95% CI: 24.4, 65.1) in patients with PD-L1 TC 1–49% (n=25). In the safety analysis set (N=40), 38 patients (95.0%) experienced ≥ 1 AE and 11 (27.5%) had Grade ≥ 3 AEs. Most common AEs were pruritus (32.5%), pyrexia (30.0%), rash (20.0%), and decreased appetite (20.0%). Serious AEs occurred in 10 patients (25.0%); AEs leading to treatment discontinuation occurred in three patients (7.5%). An AE leading to death (cerebral infarction) occurred in one patient, but the event was not considered to be related to the study drugs.

Conclusion: Combination of ociperlimab 900mg plus tislelizumab 200mg IV Q3W was well tolerated and showed preliminary antitumor activity in patients with treatment-naïve metastatic squamous or nonsquamous NSCLC with PD-L1-positive tumors (TC $\geq 1\%$).