# A phase 1 study of the OX40 agonist, BGB-A445, with or without tislelizumab, an anti-PD-1 monoclonal antibody, in patients with advanced NSCLC, HNSCC or NPC

**Authors:** Min Hee Hong,[1] Byoung Chul Cho,[1] Sanjeev Deva,[2] Fang Ma,[3] Jianhua Shi,[4] Meili Sun,[5] Pei Jye Voon,[6] David Dai-Wee Lee,[7] Shiangjiin Leaw,[8] Tahmina Rahman,[9] Hugh Giovinazzo,[9] Xin Chen,[10] Yan Dong,[9] Yifan Qin,[8] Young Joo Lee[11]

**Affiliations:** [1]Yonsei Cancer Center, Yonsei University College of Medicine, Seoul, Republic of Korea; [2]Auckland City Hospital, Auckland, New Zealand; [3]The Second Xiangya Hospital of Central South University, Changsha, Hunan, China; [4]Linyi Cancer Hospital, Linyi, Shandong, China; [5]Jinan Central Hospital, Jinan, Shandong, China; [6]Sarawak General Hospital, Kuching, Malaysia; [7]University of Malaya Medical Centre, Kuala Lumpur, Malaysia; [8]BeiGene (Shanghai) Co., Ltd., Shanghai, China; [9]BeiGene USA, Inc., San Mateo, CA, USA; [10]BeiGene USA Inc., Ridgefield Park, NJ, USA; [11]National Cancer Center, Goyang-si, Gyeonggi-do, Republic of Korea

**Background:** BGB-A445 is a monoclonal antibody OX40 agonist that does not compete with the natural OX40 ligand, reducing the likelihood of a hook effect and distinguishing it from other OX40-targeting therapies. Here, we present results from the dose expansion portion of a ph 1, open-label, dose escalation/expansion trial of BGB-A445 in pts with advanced solid tumors (NCT04215978). Ph 1a results were previously presented (Desai *et al*. *J Clin Oncol.* 2023).

**Methods:** Previously treated pts with NSCLC (Part A1), HNSCC (Part A2) or NSCLC with PD-L1 ≥50% (Part C) received BGB-A445 monotherapy, while pts with treatment-naïve recurrent/metastatic NPC (Part B) received BGB-A445 combined with tislelizumab and chemotherapy. Primary endpoints included ORR per investigator (RECIST v1.1); secondary endpoints were to assess PFS, DOR and DCR, safety/tolerability, PK, and host immunogenicity.

**Results:** As of Sep 25, 2024, 54 pts were enrolled in Part A1, 19 in Part A2, 12 in Part B and 7 in Part C. In the efficacy evaluable analysis set, ORR was 0% in Parts A1, A2 and C, and 70% (7/10; all confirmed PRs, one unconfirmed CR) in Part B. In Parts A1, A2, B and C, confirmed DCR was 49.0%, 33.3%, 100.0% and 57.1%, respectively.

TEAEs occurred in the majority of pts (**Table**). The most common treatment-related TEAEs were pyrexia (10.0% [8/80]), chills (5.0% [4/80]) and anemia (5.0% [4/80]) in the monotherapy cohorts, and anemia (75.0% [9/12]), decreased WBC (66.7% [8/12]), decreased neutrophils and decreased platelets (58.3% [7/12], each) in the combination cohort. Treatment-related serious TEAEs occurred in 2.5% (2/80; pyrexia and asthenia in a

single pt each) of pts in the monotherapy cohorts and 8.3% (1/12; febrile neutropenia) in the combination cohort. There were no BGB-A445 or tislelizumab-related TEAEs leading to treatment discontinuation or death. The most common imAE was rash (2.5% [2/80] in the monotherapy cohort; 33.3% [4/12] in the combination cohort). No Gr ≥3 imAEs or IRRs were reported.

**Conclusion:** BGB-A445 alone or in combination with tislelizumab and chemotherapy was generally well tolerated across all doses in pts with advanced NSCLC, HNSCC, and NPC, and showed preliminary antitumor activity.

**Safety**

| | **Part A1 NSCLC (N=54)** | **Part A2 HNSCC (N=19)** | **Part B NPC (N=12)** | **Part C NSCLC and PD-L1 ≥50% (N=7)** |
|---|---|---|---|---|
| **Any treatment-emergent AE** | 47 (87.0) | 16 (84.2) | 12 (100.0) | 7 (100.0) |
| Gr ≥3 | 17 (31.5) | 5 (26.3) | 11 (91.7) | 3 (42.9) |
| Serious | 21 (38.9) | 4 (21.1) | 2 (16.7) | 4 (57.1) |
| Leading to death | 4 (7.4) | 2 (10.5) | 0 (0) | 0 (0) |
| Leading to treatment discontinuation | 8 (14.8) | 3 (15.8) | 2 (16.7) | 0 (0) |
| **Any treatment-related treatment-emergent AE** | 28 (51.9) | 7 (36.8) | 12 (100.0) | 3 (42.9) |
| Gr ≥3 | 1 (1.9) | 0 (0) | 11 (91.7) | 0 (0) |
| **Any immune-mediated AE** | 6 (11.1) | 1 (5.3) | 6 (50.0) | 1 (14.3) |
| **Infusion-related reactions** | 6 (11.1) | 3 (15.8) | 3 (25.0) | 1 (14.3) |

Pts with multiple adverse events (AEs) are counted once. All AEs are listed as n (%).