Asia subgroup overall survival and long-term follow-up results of the phase 2b HERIZON-BTC-01 study: Zanidatamab in previously treated human epidermal growth factor receptor 2-amplified biliary tract cancer

Authors: Do-Youn Oh^{1*}; Huichuan Sun²; Jin Won Kim³; Hye Jin Choi⁴; Heung-Moon Chang⁵; Lequn Bao⁶; Jieer Ying⁷; Feng Xie⁸; Myung-Ah Lee⁹; Young Mi Seol¹⁰; Xiaotian Wu¹¹; Yuanyuan Bao¹²; Phillip Garfin¹³; Yi Zhao¹⁴; Jia Fan^{2**}

Affiliations: ¹Department of Internal Medicine, Seoul National University Hospital, Cancer Research Institute, Seoul National University College of Medicine, Seoul, Republic of Korea; ²Department of Liver Surgery and Transplantation, Affiliated Zhongshan Hospital of Fudan University, Shanghai, China; ³Department of Internal Medicine, Seoul National University Bundang Hospital, Seoul, Republic of Korea; ⁴Department of Internal Medicine, Severance Hospital Yonsei University Health System, Seoul, Republic of Korea; ⁵Department of Oncology, Asan Medical Center, University of Ulsan College of Medicine, Seoul, Republic of Korea; ⁶Department of Hepatobiliary and Pancreatic Surgery, Hubei Cancer Hospital, Wuhan City, China; ⁷Department of Medical Oncology, Zhejiang Cancer Hospital, Hangzhou, China; ⁸Department of Biliary Tract Surgery III, Eastern Hepatobiliary Surgery Hospital, Affiliated to Naval Medical University, Shanghai, China; ⁹Division of Medical Oncology, Department of Internal Medicine, The Catholic University of Korea, Seoul St. Mary's Hospital, Seoul, Republic of Korea; 10 Department of Internal Medicine, Pusan National University Hospital, Pusan National University College of Medicine, Busan, Republic of Korea; ¹¹Department of Data Science, Jazz Pharmaceuticals, Palo Alto, CA, United States of America; ¹²Clinical Development, BeOne Medicines, Ltd, Shanghai, China; ¹³Department of Clinical Research, Hematology/Oncology, Jazz Pharmaceuticals, Palo Alto, CA, United States of America; ¹⁴Clinical Development, BeOne Medicines, Ltd, Beijing, China.

*Lead and presenting author **Corresponding Author

ABSTRACT

Background: In patients with previously treated human epidermal growth factor receptor 2 (HER2+) biliary tract cancer (BTC), HER-2 targeted zanidatamab demonstrated a meaningful clinical benefit with a manageable safety profile in the overall population and Asia subgroup (HERIZON-BTC-01 trial, NCT04466891). Here, we report updated analyses and overall survival for Cohort 1 (HER2-amplified with either immunohistochemistry 2+ or 3+) from the Asia subgroup (China and South Korea).

Methods: This open-label, phase 2b study enrolled adults with HER2-amplified, unresectable, locally advanced/metastatic BTC, and ≥1 prior gemcitabine-containing systemic therapy. Patients received zanidatamab monotherapy (20 mg/kg intravenously every 2 weeks). The primary endpoint was confirmed objective response rate and select secondary endpoints were duration of response, progression-free survival, overall survival, and adverse events.

Results: Cohort 1 enrolled 50 patients from Asia. Baseline demographic and disease characteristics were stated previously. As of July 28, 2023, 4 patients (8%) remained on treatment; median study follow-up was 20.8 months (range 16.5-31.9). Efficacy data is presented in the table. Thirty-five patients (70%) experienced ≥1 treatment-related adverse events (TRAEs); most common were infusion-related reaction (42%) and diarrhea (28%). Seven patients (14%) experienced ≥1 grade 3 or higher TRAEs, most common was ejection fraction decreased (4%); 3 patients (6%) experienced

serious TRAEs. One patient (2%) had a TRAE leading to treatment discontinuation; no TRAE leading to death was reported.

Conclusions: With longer follow-up, zanidatamab demonstrated extended response with an encouraging median overall survival for patients from Asia with previously treated HER2+ BTC and remained well tolerated with manageable adverse events.

Table:

	Asia subgroup (n=50)
Objective response rate ^a , % (95% CI) ^b	42 (28-57)
Median duration of response, months (95% CI) ^c	11.2 (3.9-not estimable)
Duration of response ≥16 weeks, n (%) (95% CI) ^b	17 (81) (58-95)
Median progression-free survival, months (95% CI) ^c	5.5 (3.3-7.2)
Median overall survival, months (95% CI) ^c	13.4 (9.7-18.1)
12-month overall survival, % (95% CI) ^d	54 (38-67)

^aConfirmed by independent central review

per RECIST v1.1. 95% CI estimated using

methods:

CI, confidence interval; RECIST, Response Evaluation Criteria in Solid Tumors.

^bClopper-Pearson exact binomial.

^cBrookmeyer & Crowley with log-log transformation.

^dGreenwood.