

LBA71

PANKU-Lung01: Randomized phase III study of izalontamab brengitecan (iza-bren) in EGFR-mutant non-squamous non-small cell lung cancer (NSCLC) after progression on a third-generation EGFR TKI

L. Zhang¹, Y. Yang¹, X. Meng², Z. Hu³, W. Zheng⁴, J. Cui⁵, Y. Luo⁶, L. Wu⁶, M. Huang⁷, H. Xu⁸, J. Hu⁹, Y. Zhao¹⁰, W. Yao¹¹, S. Xiao¹², H. Zhu¹³, Y. Zhu¹⁴

¹ Department of Medical Oncology, Sun Yat-sen University Cancer Center, Guangzhou, China, ² Department of Radiation Oncology, Shandong Cancer Hospital and Institute, Shandong First Medical University, Jinan, China, ³ Department of Medical Oncology, Fudan University Shanghai Cancer Center, Shanghai, China, ⁴ Department of Radiotherapy, Shengjing Hospital of China Medical University, Shenyang, China, ⁵ Department of Cancer Center, The First Hospital of Jilin University, Changchun, China, ⁶ Department of Thoracic Medical Oncology, Hunan Cancer Hospital/The Affiliated Cancer Hospital of Xiangya School of Medicine, Central South University, Changsha, China, ⁷ Department of Thoracic Oncology, West China Hospital of Sichuan University, Chengdu, China, ⁸ Department of Thoracic Oncology, Clinical Oncology School of Fujian Medical University, Fujian Cancer Hospital, Fuzhou, China, ⁹ Department of Respiratory Medicine, Shanghai Geriatric Medical Center, Zhongshan Hospital, Fudan University, Shanghai, China, ¹⁰ Department of Medical Oncology, The Affiliated Cancer Hospital of Zhengzhou University & Henan Cancer Hospital, Zhengzhou, China, ¹¹ Department of Thoracic Oncology, Sichuan Clinical Research Center for Cancer, Sichuan Cancer Hospital & Institute, Sichuan Cancer Center, University of Electronic Science and Technology of China, Chengdu, China, ¹² Medical and Pharmacological Research Department, Baili-Bio (Chengdu) Pharmaceutical Co., Ltd., Chengdu, China, ¹³ Department of Biometrics, SystImmune Inc., Redmond, United States of America ¹⁴ Sichuan Biokin Pharmaceutical Co., Ltd, Chengdu, China

Background

Patients (pts) with advanced/metastatic EGFR-mutant NSCLC who have progressed on an EGFR TKI have limited treatment options. Iza-bren is a first-in-class bispecific antibody-drug conjugate (ADC) targeting EGFR and HER3 conjugated to a potent topoisomerase I inhibitor (Ed-04) via tetrapeptide-based cleavable linker.

Methods

Eligible pts had locally advanced or metastatic non-squamous NSCLC with *EGFR* sensitizing mutant (exon 19 deletion or L858R), and progression on prior 3rd generation EGFR TKI. Pts were randomized 1:1 to receive iza-bren (2.5 mg/kg IV D1D8 Q3W) or platinum-based chemotherapy (PBC) (pemetrexed+cisplatin/carboplatin, Q3W). The primary endpoint was PFS assessed by blind independent central review (BICR); secondary endpoint included OS. A pre-planned interim analysis served as the final analysis for PFS and the interim analysis for OS.

Results

As of data cutoff (Jul 15, 2026), 422 pts were treated (iza-bren/PBC, 216/206). Median follow-up for PFS was 14.6 vs 15.2 mo (iza-bren/PBC). mPFS by BICR was 11.14 mo (95% CI, 9.17-12.68) with iza-bren vs 5.65 mo (95% CI, 5.45-5.95) with PBC (HR = 0.40; 95% CI, 0.31-0.51; p < 0.0001). The OS data were immature; however, a favorable trend towards improved mOS was observed with iza-bren vs PBC (HR= 0.66; 95% CI, 0.47–0.91). The cORR by BICR was 60.2% vs 34.5%, and the mDOR was 10.45 vs 5.68 mo. Gr≥3 TRAEs were predominantly hematologic in nature. TRAEs were manageable with standard supportive care, and only 1.9% of pts in the iza-bren group discontinued treatment due to TRAEs. ILD was uncommon with iza-bren (adjudicated ILD, two [0.9%]; one Gr 3 and one Gr 1). No new safety signals were observed.

Conclusions

Iza-bren demonstrated a statistically significant and clinically meaningful improvement in PFS vs PBC in pts with *EGFR*-mutant non-squamous NSCLC after progression on a 3rd generation EGFR TKI, meeting the primary endpoint. A trend towards OS improvement was observed. The safety profile was manageable and consistent with previous studies. These results support iza-bren as a new standard of care in this population in China. A global study is ongoing (NCT07100080).

Clinical trial identification

NCT06382116.

Legal entity responsible for the study

Baili-Bio (Chengdu) Pharmaceutical Co, Ltd.

Funding

Baili-Bio (Chengdu) Pharmaceutical Co, Ltd.

Disclosure

L. Zhang: Financial Interests, Personal, Invited Speaker: Sichuan Biokin Pharmaceutical, Akesobio; Financial Interests, Institutional, Research Grant, research grant & Trial Chair: AZ; Financial Interests, Institutional, Trial Chair: QiLu pharm, Henrui Pharm, Novartis, China Shiyao Pharma, Kelun Pharm, Sichuan Biokin Pharmaceutical, Pfizer, Pierre-Fabre, Akesobio; Financial Interests, Institutional, Research Grant: Roche. L. Wu: Financial Interests, Personal, Invited Speaker: AstraZeneca, Roche, Bristol-Myers Squibb, MSD, Pfizer, Lilly, Boehringer Ingelheim, Merck, Innovent, Hengrui. Y. Zhao: Financial Interests, Institutional, Local PI, NA: Sichuan Biokin Pharmaceutical. S. Xiao: Financial Interests, Personal, Full or part-time Employment: Baili-Bio (Chengdu) Pharmaceutical Co., Ltd. H. Zhu: Financial Interests, Personal, Full or part-time Employment: SystImmune Inc; Financial Interests, Personal, Stocks/Shares: SystImmune Inc. Y. Zhu: Financial Interests, Personal, Full or part-time Employment: SystImmune Inc; Financial Interests, Personal, Ownership Interest: SystImmune Inc, Baili Pharmaceutical. All other authors have declared no conflicts of interest.

© European Society for Medical Oncology