

REAL-WORLD EFFECTIVENESS OF ATEZOLIZUMAB-BEVACIZUMAB, LENVATINIB AND SORAFENIB IN THE PATIENTS WITH UNRESECTABLE HEPATOCELLULAR CARCINOMA: A MULTI-INSTITUTIONAL STUDY IN TAIWAN

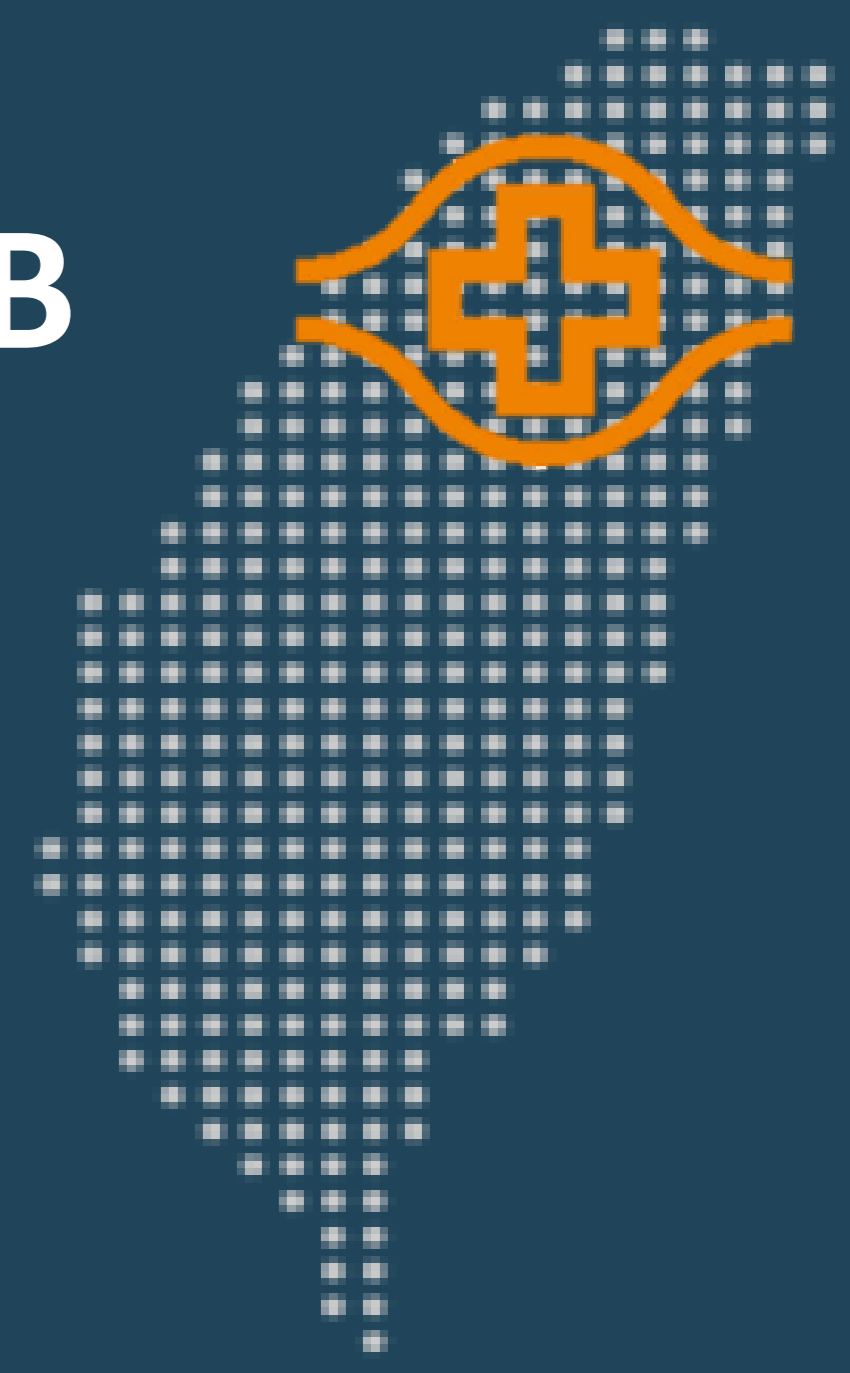
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Background

Several breakthrough systemic treatments, including atezolizumab plus bevacizumab (atezo/beva) and lenvatinib, as first-line therapies for locally advanced hepatocellular carcinoma (HCC). However, real-world comparative data involving all three treatment groups, particularly in Asian populations, remain limited.

Methods

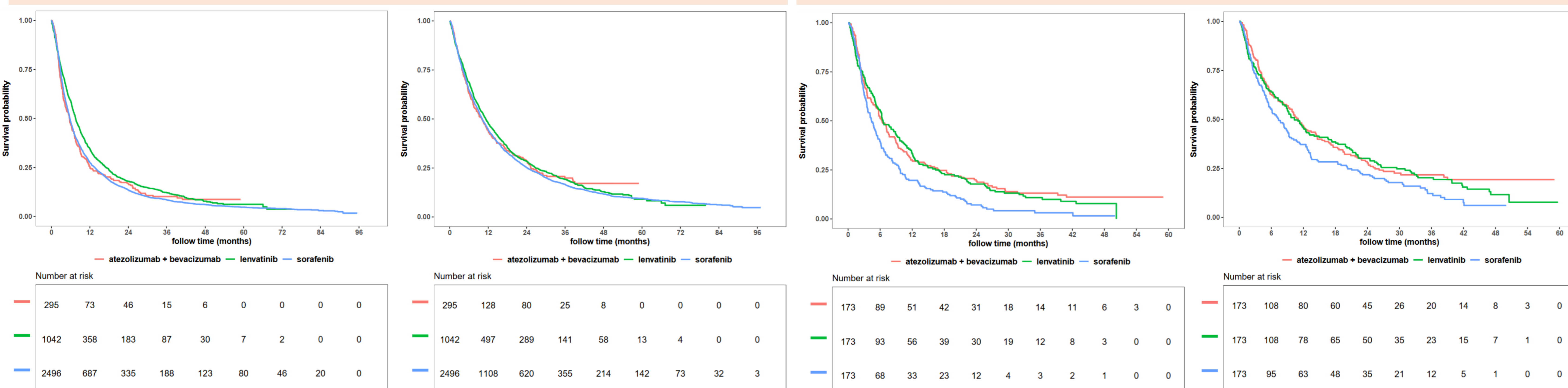
Database	The Electronic medical records from a multi-institutional healthcare System in Taiwan
Patients	Patients diagnosed with BCLC stage B or C HCC
Exposure	Initiation of first-line systemic therapy with atezo/beva, lenvatinib, or sorafenib
Outcomes	Overall survival (OS) and progression-free survival (PFS)
Included period	Followed until death, loss to follow-up, or December 31, 2024, whichever occurred first
Followed period	Between 2017 and 2022
Statistical methods	Propensity score matching (PSM) with multiple treatments group were applied

Results

- We included a total of 3,833 patients meeting all study criteria.
- Before matching, atezo/beva group had youngest age and worst disease burden (e.g., presence of macrovascular invasion, extra-hepatic spread, highest alpha fetoprotein level and worst liver functions).
- After matching**, baseline characteristics were well-balanced across the groups.
 - ✓ The median PFS was 6.3, 6.5 and 4.4 months among atezo/beva, lenvatinib and sorafenib groups, respectively.
 - ✓ The median OS was 11.0, 10.3 and 7.3 months among atezo/beva, lenvatinib and sorafenib groups, respectively.

Before PSM: PFS (left) and OS (right)

After PSM: PFS (left) and OS (right)



Conclusions

Both atezo/beva and lenvatinib were associated with improved clinical outcomes compared to sorafenib in a real-world cohort of Taiwanese HCC patients. Further studies are warranted to identify specific prognostic factors.