## AB019. Anti-angiogenesis therapy in patients of thymic malignancies with hepatic metastasis

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**Background:** Thymic malignancies with hepatic metastases are rare with limited published trials. We performed a retrospective analysis to compare the treatment activity with thymic epithelial tumors (TETs).

**Methods:** Patients with advanced or recurrent liver metastatic TETs at Shanghai Chest Hospital between January 2016 and October 2021 was identified, and those who were treated with first-line treatment when diagnosis with hepatic metastases were included in this analysis.

Results: A total of 21 thymic malignancy patients were identified, of whom 14 received chemotherapy alone (67%, group 1) and 7 received anti-angiogenesis-based treatment (33%, group 2). There were 17 patients (81%) with thymic carcinoma and 4 patients (19%) with thymoma including 15 males and 5 females with a median age of 53 years with the median progressive free survival (PFS) was 8.27 months [95% confidence interval (CI): 6.50-10.03 months] for all the patients, and the median overall survival (OS) was 20.37 months (95% CI: 11.35-29.38 months). Among the 14 patients receiving chemotherapy alone (group 1), 1 patient (7.14%) with IEP treatment for partial response (PR), 9 patients (64.29%) for stable disease (SD) with DP, TP, IEP, PC, COPP, PEM, TP, and S-1 respectively, and 4 patients (21.43%) for progressive disease (PD) with TP, CVP, EP and PC respectively, a total disease control rate

(DCR) of 71.43% with the median PFS of 6.07 months (95% CI: 3.66–8.47 months) and the median OS of 20.37 months (95% CI: 16.69–24.04 months). Among the 7 patients receiving anti-angiogenesis (group 2), 1 patient (14.29%) with lenvatinib for PR, and 6 patients (85.71%) for SD with PC/bevacizumab, anlotinib, TP/bevacizumab and lucitanib, respectively, a total DCR of 100% with the median PFS of 18.53 months (95% CI: 0–39.59 months) and the median OS of 26.50 months (95% CI: 4.48–48.52 months). Compared with the chemotherapy alone, patients with anti-angiogenesis-based treatment had a significant better PFS

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(18.53 vs. 6.07 m, P=0.03). **Conclusions:** This small retrospective study demonstrates modest anti-angiogenesis activity and disease stabilization in hepatic metastatic TETs with a clinically meaningful

in hepatic metastatic TETs with a clinically meaningful duration, and future studies with a large population of TETs are required for more understanding of anti-angiogenesis therapy.

**Keywords:** Thymic epithelial tumor (TET); hepatic metastasis; anti-angiogenesis therapy

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## Footnote

*Conflicts of Interest:* All authors have completed the ICMJE uniform disclosure form (available at https://med. amegroups.com/article/view/10.21037/med-23-ab019/coif). The authors have no conflicts of interest to declare.

*Ethical Statement:* The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013). The study was approved by the institutional ethics board of Shanghai Chest Hospital (No.: IS21116 the registration number of the ethics board) and individual consent for this retrospective analysis was waived.

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