Adjuvant therapy in the treatment of gallbladder cancer: A meta-analysis

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Background: The benefit of adjuvant therapy (AT) for gallbladder cancer (GBC) is unclear as evidenced by conflicting results from nonrandomized studies. Here we aimed to perform a meta-analysis to determine the impact of AT on overall survival (OS).

Methods: We used data from MEDLINE, EMBASE and the Cochrane Collaboration Library and published between October 1967 and October 2014. Studies that evaluated AT compared with curative-intent surgery alone for resected GBC were included. Subgroup analyses of benefit based on node status, margins status, and American Joint Committee on Cancer (AJCC) staging were prespecified. Data were weighted and pooled using random-effect modeling.

Results: Ten retrospective studies involving 3,191 patients were analyzed. There was a nonsignificant improvement in OS with AT compared with surgery alone (hazard ratio [HR], 0.76; 95% confidence interval [CI], 0.56–1.03). A significant improvement was observed in OS with chemotherapy (CT) compared with surgery alone (HR, 0.42; 95% CI, 0.22–0.80) by sensitivity analysis. The greatest benefit for AT was also observed in those with R1 disease (HR, 0.33; 95% CI, 0.19–0.59), LN-positive disease (HR, 0.71; 95% CI, 0.63–0.81), and AJCC staging meeting or exceeding tumor Stage II (HR, 0.45; 95% CI, 0.26–0.79), but not in those with LN-negative or R0 disease.

Conclusion: Our results strongly support the use of CT as an AT in GBC. Moreover, patients with node positivity, margin positivity, or non-stage I disease are more likely to benefit from AT.

Biography

Bin Wang has graduated from Chinese PLA Second Military Medical University and received M.D. He is an attending physician of department of oncology, Changhai Hospital, the Second Military Medical University of China. He is also a China GCP alliance youth committee member. His major interest is in diagnosis and treatment of malignancy. His research area is mainly in basic and clinical of tumor immunity. He is also in charge of a basic research of China National Natural Science Foundation on immune therapy of breast cancer (NO. 81472479).