

Effectiveness And Safety Of Sorafenib 400 Mg Vs 800 Mg Initial Dose On Survival In Patients With Advanced And Intermediate Stage Hepatocellular Carcinoma: A Systematic Review And Meta-analysis

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Background : Sorafenib is a multi-tyrosine kinase inhibitor that has been shown to improve survival in patients with advanced-stage hepatocellular carcinoma (HCC). Based on the search to date, there are quite a number of studies evaluating the effectiveness of the modified dose of sorafenib (400 mg) compared to the standard dose (800 mg) on the survival of patients with advanced HCC, but the previous studies have shown varying results. This SR aimed to determine the effectiveness of initial dose sorafenib 400 mg compared with initial dose sorafenib 800 mg on survival in patients with advanced HCC and its side effects in both groups.

Methods : This systematic review is conducted by following the PRISMA standard. We searched PubMed, Embase, EBSCOhost, and Proquest through April 30, 2021. Secondary searching was done by snowballing method manual searching through global index Medicus, GARUDA, SINTA, and several digital libraries of universities in Indonesia. The selection was carried out on RCTs (Randomized Controlled Trials) and NRSIs (Non-randomized Studies of Interventions) studies that included patients with advanced stages who received initiation therapy of sorafenib at a dose of 800 mg and a dose of 400 mg which assessed overall survival and side effects. Of the 603 articles, there were 5 NRSI studies that met the eligibility criteria.

Results : Administration initial dose of sorafenib 400 mg was significantly more effective on overall survival compared to the initial dose of sorafenib 800 mg in patients with advanced HCC (HR 0.84; 95% CI 0.71–0.98; p=0.03). There was no difference in the overall incidence of adverse events to varying degrees in the two groups (pooled OR 0.93; 95% CI 0.67–1.30; p=0.68).

Conclusions : sorafenib 400 mg initial dose has a better effectiveness on overall survival with no significant difference in the incidence of adverse events compared to sorafenib 800 mg initial dose in patients with advanced and intermediate HCC.

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