A Retrospective Descriptive Study of Survival Outcomes and Adverse Events in Palliative Clinical Trials for Advanced Hepatocellular Carcinoma Patients

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Aims: Primary Aim: To describe the effects of trial participation for hepatocellular carcinoma patients in Singapore, and to investigate prognostic factors for overall survival Secondary Aim: To evaluate the demographic and clinical characteristics of HCC trial and non-trial participants, compare adverse events occurrence and frequency, and to compare predictive value of Child Pugh vs ALBI scores

Methodology: Clinical course and treatment outcomes of 259 patients with Hepatocellular Carcinoma treated between 2007 and 2017 at NCCS Department of Medical Oncology were recorded. Overall survival and adverse events were compared between 136 trial and 123 non-trial participants. The retrospective study was conducted between Aug 2017 to July 2018.

Result: Median overall survival was comparable in trial vs. non-trial participants (11.63 vs 9.27 months (p=0.386)). Multivariate analysis indicated that prior primary liver resection, BCLC stage, ALBI score and ECOG performance status remained prognostic of OS. Trial participation did not have a statistically significant effect on patients' overall survival, hazard ratio= 1.10 (95% Cl= (0.82, 1.48); (p= 0.519)). Statistically significant difference was found between the trial and non-trial groups in adverse event occurrence (63.24% vs. 33.33%. (p< 0.001)) and frequency (34.56% vs. 7.32%. (p< 0.001)).

Conclusion: Trial participation neither improved nor worsened overall survival of advanced HCC patients. But is associated with increased adverse event occurrence and frequency. Developing a trial participation prognostic score may be helpful in identifying patients who would benefit from trial participation in terms of increased overall survival and minimized adverse events.