



Supplementary Fig. S5: CTLA-4 blockade is critical for efficacy of combined chemotherapy with ICB in ICC by grafting 425 murine cells in C57Bl/6/FVB F1 mice. (A) Tumor curve of ICC after treatment: GC+ICB therapy induced a tumor growth delay that was significant superior to GC alone or even GC+aCTLA4, while ICB alone was ineffective in 425-ICC and SS49-ICC models. **(B)** Weight change demonstrated that GC+ICB is tolerance when compared with GC or ICB alone. **(C)** GC+ICB combined treatment significantly reduced ICC-induced morbidity, by reducing lung metastasis. **(D)** GC+ICB combined treatment significantly reduced ICC-induced morbidity, by reducing ascites and **(E)** pleural effusions. GC: gemcitabine plus cisplatin; ICB: anti-PD-1 antibody plus anti-CTLA-4 antibody. *p < 0.05 from Unpaired t test.