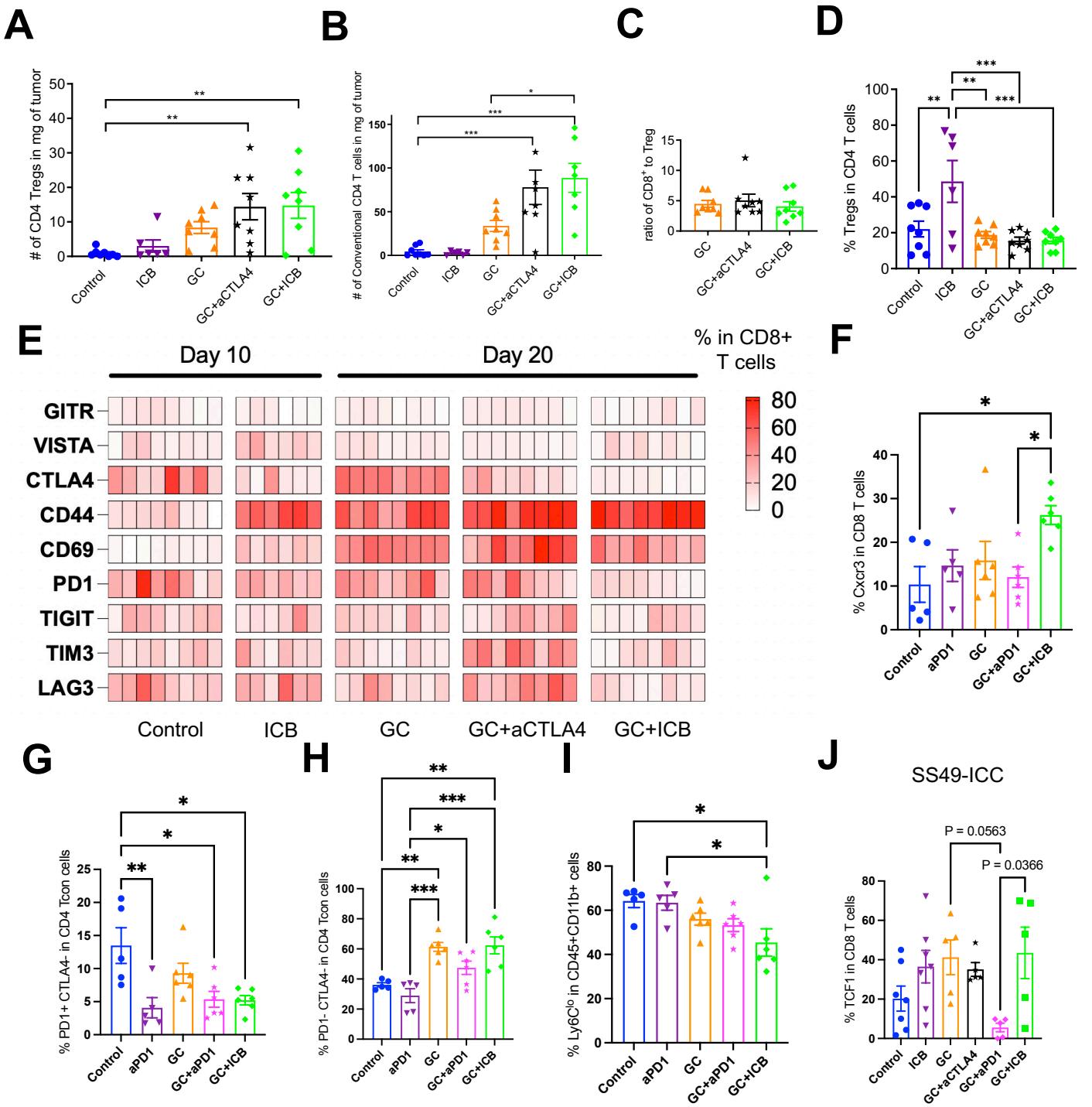

Supplementary Fig. S7: Immunophenotyping in murine 425-ICC and SS49-ICC. (**A**,**B**) Numbers of CD4⁺FoxP3⁺ Treg (**A**) and CD4⁺ conventional T cells (**B**) proportionally increased in all GC-treated groups. (**C**) The ratio of CD8⁺ T cells to Treg showed no significant difference between GC-treated groups. (**D**) The frequency of Tregs in all CD4⁺ T cells in GC-treated groups was not increased. (**E**) Immunophenotyping of CD8⁺ T cells from treated ICC tissues with immune checkpoint molecules and activation markers. (**F**) GC and dual ICB significantly increased the frequency of Cxcr3⁺ T cells compared to GC+anti-PD1 alone. (**G,H**) GC and ICB reduced the frequency of PD1⁺CTLA⁻ cells in conventional CD4 T cells, while increased the frequency of PD1⁻CTLA4⁻ cells. (**I**) GC and dual ICB reduced the frequency of M-MDSCs. (**J**) GC and dual ICB enhanced the frequency of TCF1⁺ CD8 T cells compared to GC+anti-PD1 in SS49-ICC model. *p < 0.05; **p < 0.01; ***p < 0.001 from Tukey's multiple comparisons test (**A-D,F-J**). GC: gemcitabine plus cisplatin; ICB: anti-PD-1 antibody plus anti-CTLA-4 antibody; ICC, intrahepatic cholangiocarcinoma; M-MDSCs, monocytic myeloid-derived suppressor cells.