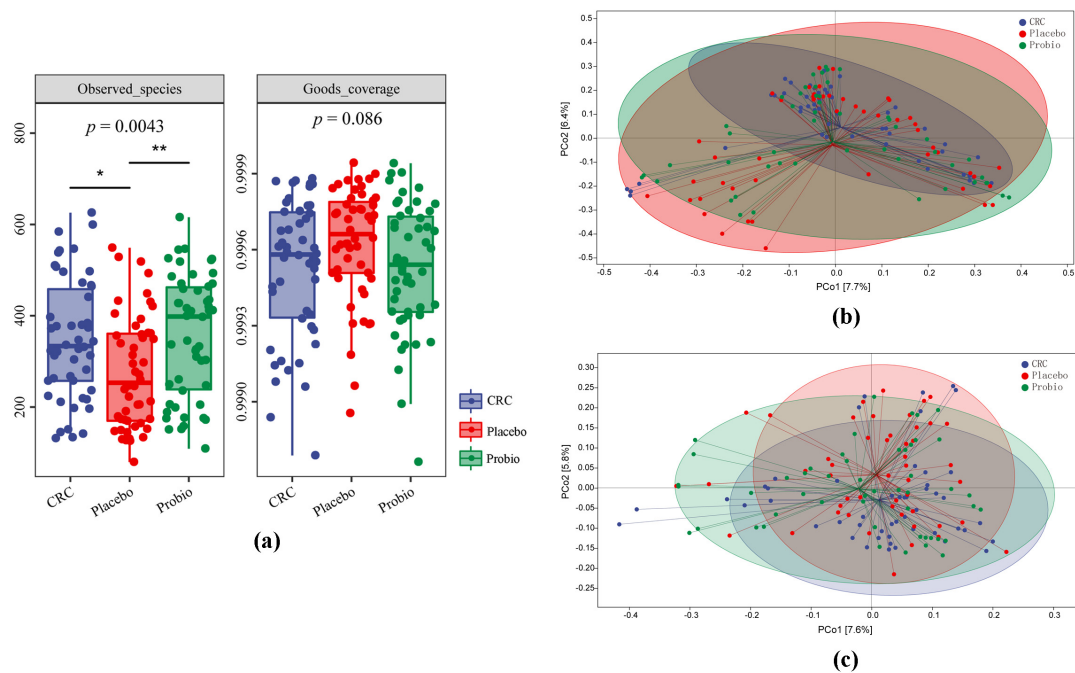
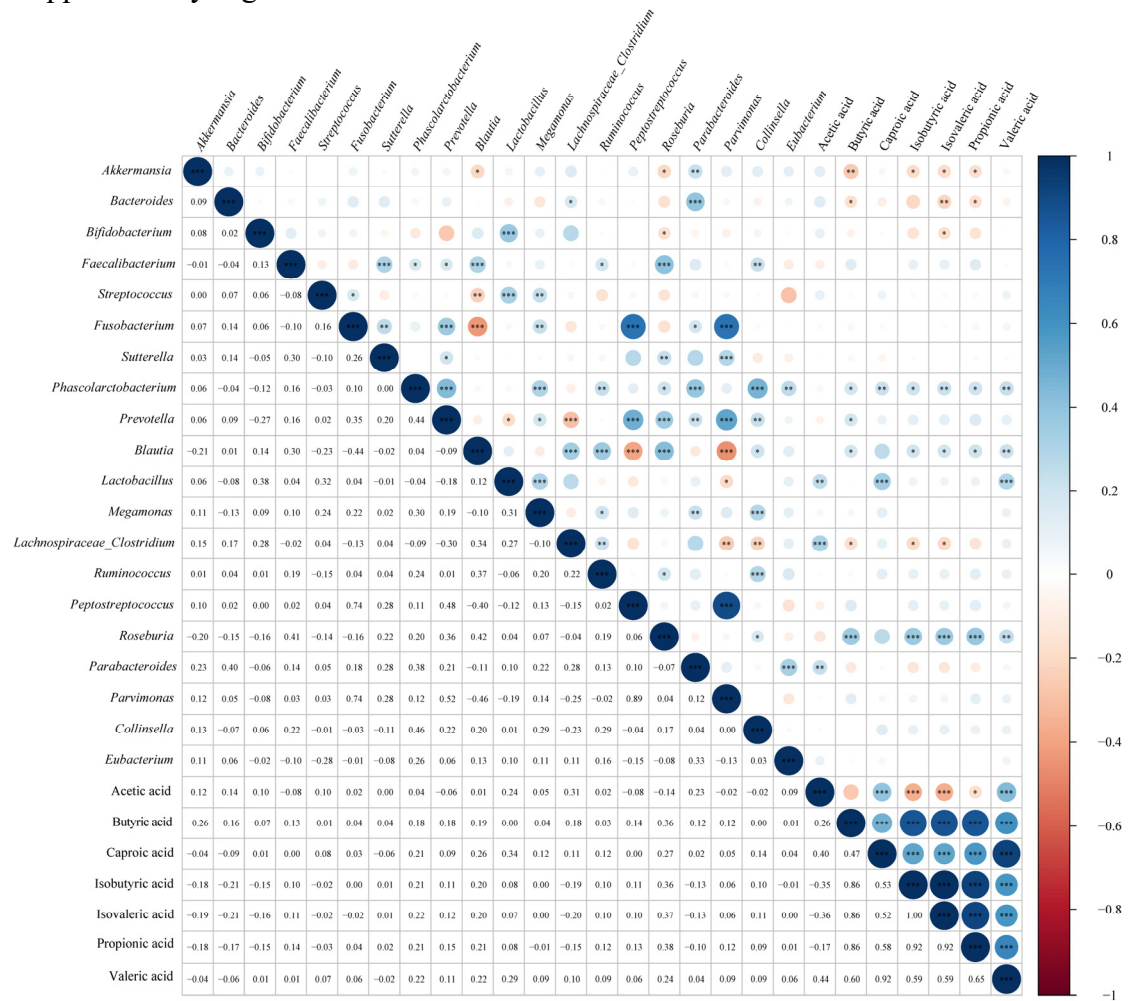


# Supplementary Figure S1



**Figure S1. Comparison of the differences of  $\alpha$  and  $\beta$  diversities among CRC 428 patients.** (a) Observed species and Goods\_coverage indexes of gut microbial  $\alpha$  diversity in the fecal samples among the three groups. (b) and (c) The PCoA analysis of gut microbial  $\beta$  diversity based on Bray\_curtis and Weighted\_unifac distances, respectively. CRC, the standard reference group before anticancer treatment. Placebo, the control group taking placebo. Probio, the treatment group taking probiotics combination. Multiple comparison analysis based on Kruskal-Wallis test following dunn's test, \*  $p < 0.05$ , \*\*  $p < 0.01$ .

Supplementary Figure S2



**Figure S2. Spearman correlation analysis between altered gut microbes at the genus level and SCFAs.** P values are depicted in red and blue, where red refers to a negative correlation and blue refers to a positive correlation. \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.0001.