



**S5 Fig.** (A) Heatmap of the genetic mutations identified in tumor tissues from The Cancer Genome Atlas Program-Colon Adenocarcinoma/Rectum adenocarcinoma (TCGA-COAD/READ) cohort.

Different types of alterations are presented with colors as illustrated. (B) Overlap of the mutations identified from tissue samples and blood samples. (C, D) Kaplan-Meier plots of disease-free survival (C) and overall survival (D) analysis by preoperative (preop) circulating tumor DNA (ctDNA) status determined by tumor-agnostic method. (E, F) Kaplan-Meier plots of disease-free survival (E) and overall survival (F) analysis by preop ctDNA status determined by tumor-informed assay.