



**Supplementary Figure 5. Association between cfDNA concentration and residual cancer burden (RCB).** CfDNA concentration was measured in the plasma of patients with **A.** hormone receptor-positive HER2-negative (HR+HER2-) and **B.** triple-negative breast cancer (TNBC). Blood was collected at pretreatment (T0), 3 weeks after treatment initiation (T1), 12 weeks after treatment initiation between paclitaxel-based treatment and anthracycline regimens (T2), and after neoadjuvant chemotherapy (NAC) before surgery (T3). RCB was divided into 4 classes: RCB-0, equivalent to pathologic complete response, and RCB-I, -II, -III, representing limited, moderate, and extensive residual cancer after NAC, respectively. Pairwise P values were calculated using the Wilcoxon rank sum test, with Bonferroni correction to adjust for multiple comparisons.