



Figure S3. Correlation analysis between alpha-diversity and clinical outcomes. (a) Chao 1, (b) Shannon and (c) inverse Simpson indices scores of the gut microbiota in patients stratified according to response to ICB. CB: clinical benefit; PD: progression disease. Statistical analysis was performed using the Mann-Whitney U rank sum test. Error bars represent the distribution of alpha-diversity scores. (d-f) Kaplan-Meier plot of progression-free survival in patients with high or low alpha-diversity indices. (g-i) Kaplan-Meier plot of overall survival in patients with high or low alpha-diversity indices. Cutoff values correspond to the median of index scores: 167 (Chao 1 index), 3.4

(Shannon index) and 14.25 (inverse Simpson index). Statistical analysis was performed using the log-rank test.