



Supplementary Figure 3. (A) Metabolite heatmap of significantly altered metabolites between BLCA former smokers and BLCA current smokers. Kaplan-Meier survival plots of the 17 gene signature in BLCA cohorts (B) Riester BLCA smokers (bottom 35% and top 65%) (C) Riester BLCA never smokers (bottom 35% and top 65%). Higher signature score (n=49, log-rank p=0.0407) in Riester for the integrated gene signature exhibited significant poor survival.