Supplement for: Circulating Metabolites May Illustrate Relationship of Alcohol Consumption with Cardiovascular Disease

Supplemental Figure legends

Supplemental Figure 1. Comparison of Association of Alcohol Consumption and Metabolites with or without Adjusting for eGFR. Panel A: comparison of beta; Panel B: comparison of -log10 (p value). Two models both were performed adjusting for age, sex, batch, smoking status, BMI, physical activity index and diet score, and family relationship as random effect. eGFR, estimated glomerular filtration rate.

Supplemental Figure 2. Comparison with Roekel's Study. Panel A: comparison of beta; Panel B: comparison of t value. Only in this analysis, alcohol consumption (g/day) in this study was plus 1 and natural log transformed. The sex and batch-adjusted residual of metabolites from linear mixed model were used as outcome. Then we applied linear mixed model for alcohol drinking and residual of metabolites in linear mixed model, adjusting for age, sex, smoking status, BMI, physical activity, diet score as fixed effect, and familial relationship as random effect. But Roekel's study used linear model and covariates included age at blood collection, sex, country, fasting status at blood collection, smoking status, BMI, Cambridge physical activity index, and daily intake of energy, meat and meat products, fish, and shellfish.

Supplemental Figure 3. Number of Metabolites Significantly Associated with Each Type of Alcohol Consumption. Panel A: three type of alcohol consumption; Panel B: three type of alcohol consumption and total alcohol consumption. All models were performed adjusting for age, sex, batch, smoking status, BMI, physical activity index and diet score, and family relationship as random effect.

Supplemental Figure 4. Comparison of Association Analyses of Alcohol Consumption with Metabolites. Panel A-C, comparison of effect size from association analyses of cumulative average total alcohol consumption and each type of alcohol consumption with metabolites. Panel D-F, comparison of effect size from association analyses each type of alcohol consumption with metabolites. All models were performed adjusting for age, sex, batch, smoking status, BMI, physical activity index and diet score, and family relationship as random effect.
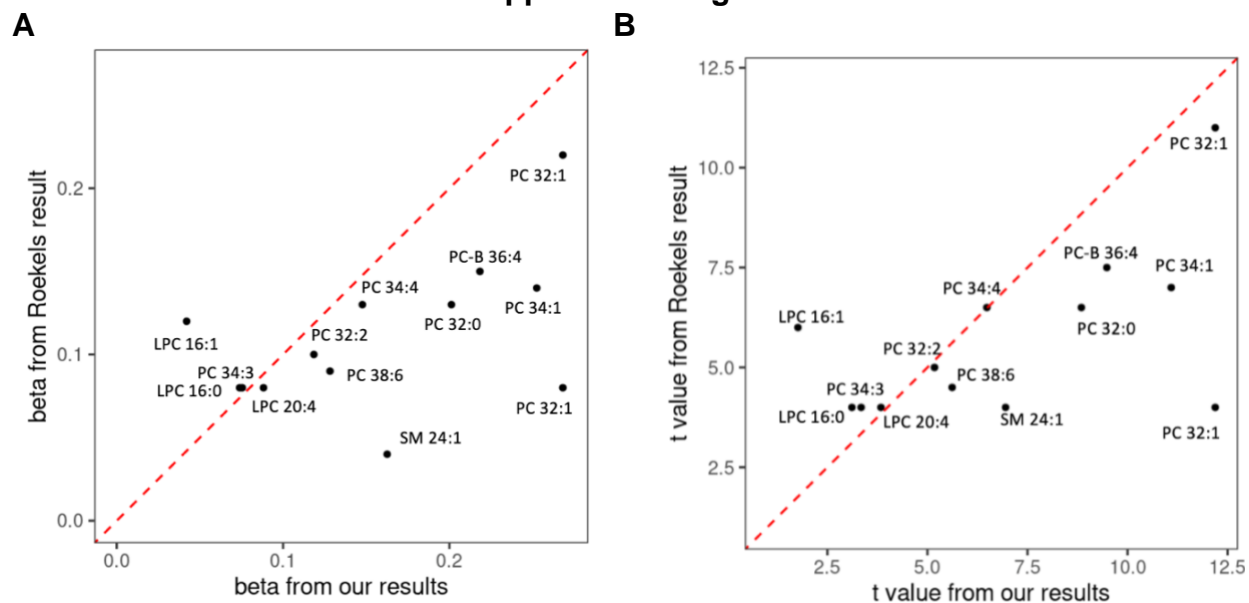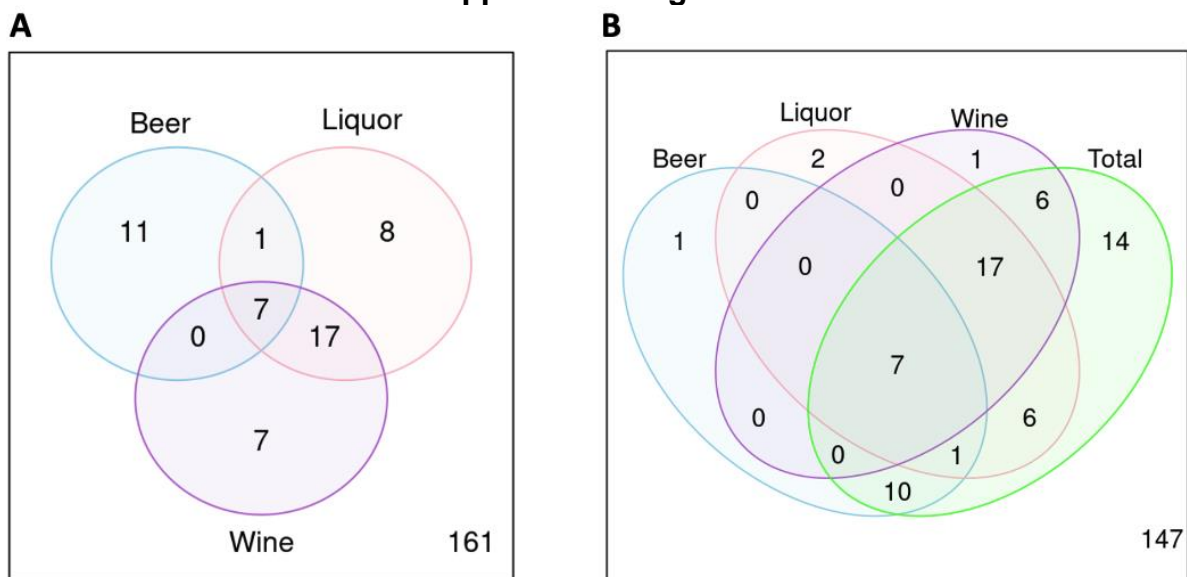
Supplemental Figure 1

A
B

Supplemental Figure 2

A

B
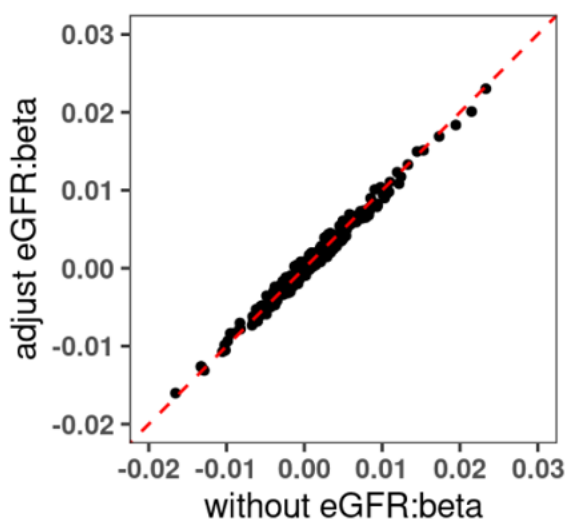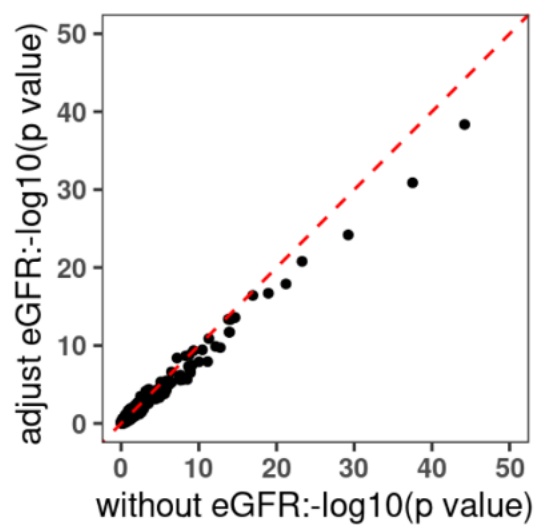
Supplemental Figure 3

Supplemental Figure 4