



Figure S1. Sex- and APOE-specific metabolic differential expression signatures

The differentially produced metabolites are illustrated by the log-fold change (logFC) on X-axis and $-\log_{10}$ (P-value) on the Y-axis of every metabolite between AD and CN in each group of subjects. (A) AD vs CN in all subjects without stratification; (B) Male; (C) Female; (D) *APOE*ε4+; (E) *APOE*ε4-; (F) Male *APOE*ε4+; (G) Male *APOE*ε4-; (H) Female *APOE*ε4+; (I) Female *APOE*ε4-. The horizontal dashed line corresponds to the $P = 0.05$ and the vertical dashed line on the left indicate $\log_{FC} = -1$ and on the right indicate $\log_{FC} = 1$.