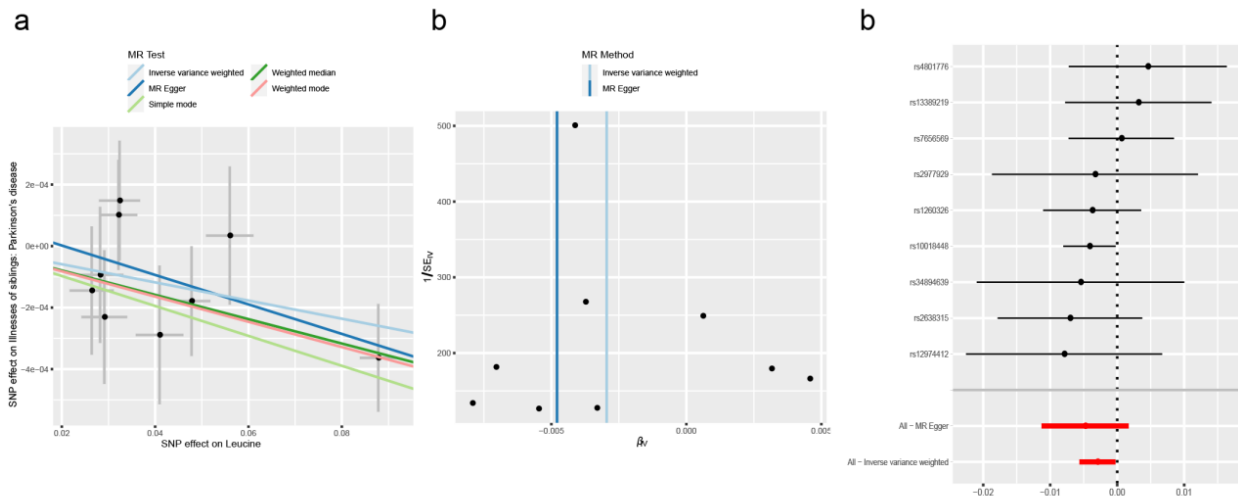
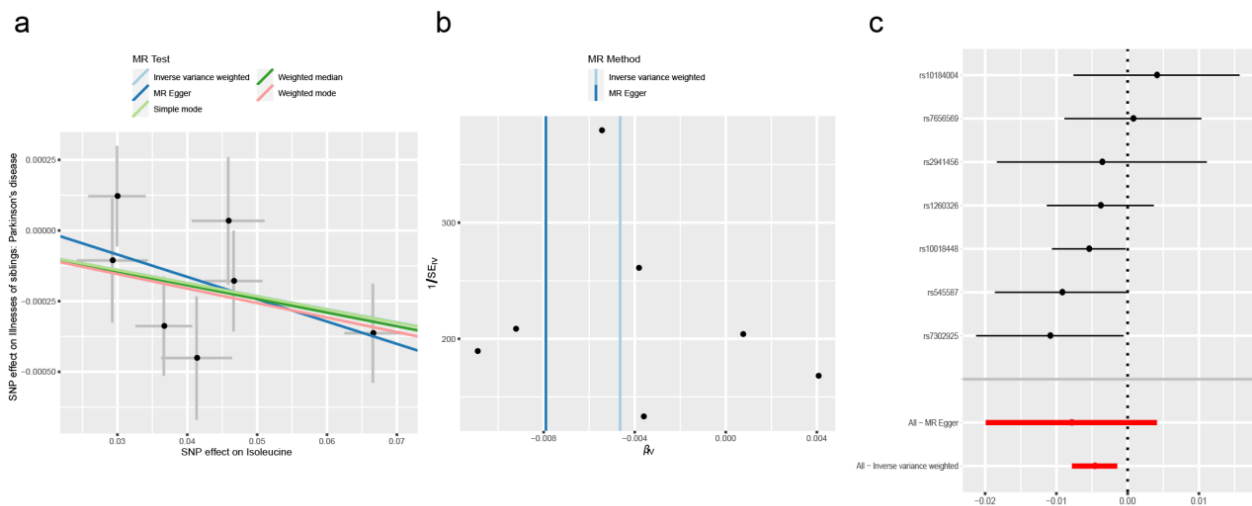


# Supplementary Material

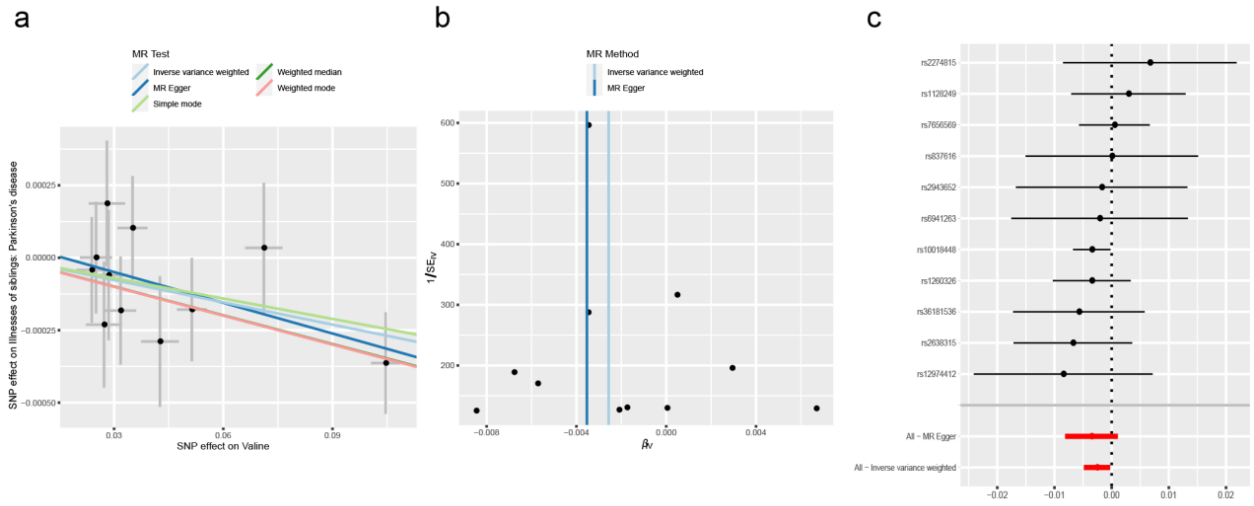
## The Associations Among Gut Microbiota, Branched Chain Amino Acids, and Parkinson's Disease: Mendelian Randomization Study



**Supplementary Figure 1.** The causal effect of leucine on PD risk. (a) Scatter plot, (b) Funnel plot and (c) Forest plot. PD, Parkinson's disease.



**Supplementary Figure 2.** The causal effect of isoleucine on PD risk. (a) Scatter plot, (b) Funnel plot and (c) Forest plot. PD, Parkinson's disease.



**Supplementary Figure 3.** The causal effect of valine on PD risk. (a) Scatter plot, (b) Funnel plot and (c) Forest plot. PD, Parkinson's disease.