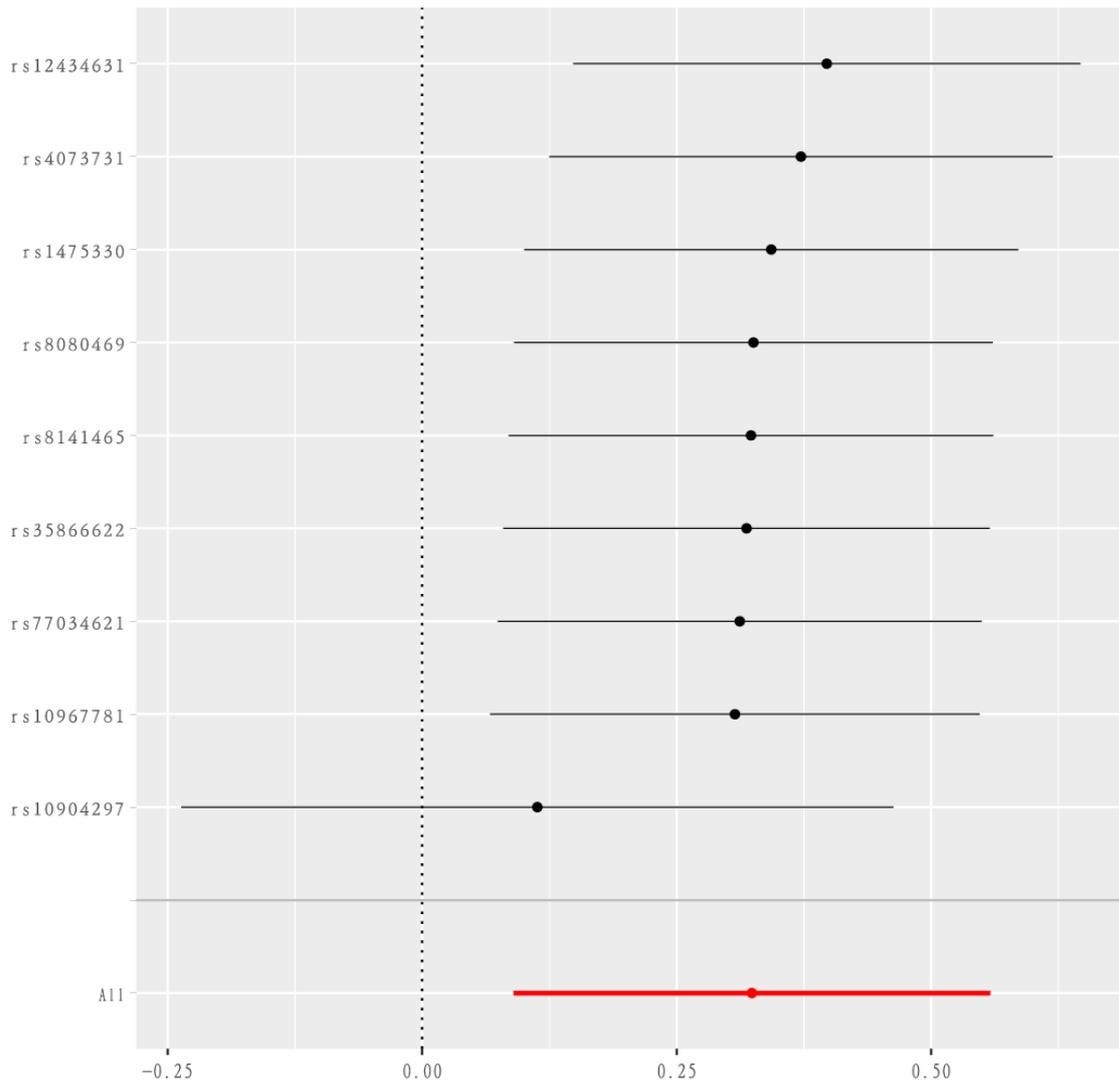


**Supplementary Figure S1:** Plots of leave-one-out analysis for MR estimates of the causal effect of 3-indoleglyoxylic acid on AITD.

AITD, autoimmune thyroid disease; MR, Mendelian randomization.



**Supplementary Figure S2:** Plots of leave-one-out analysis for MR estimates of the causal effect of *Ruminococcus torques* group on GD.

GD, Graves' disease; MR, Mendelian randomization.