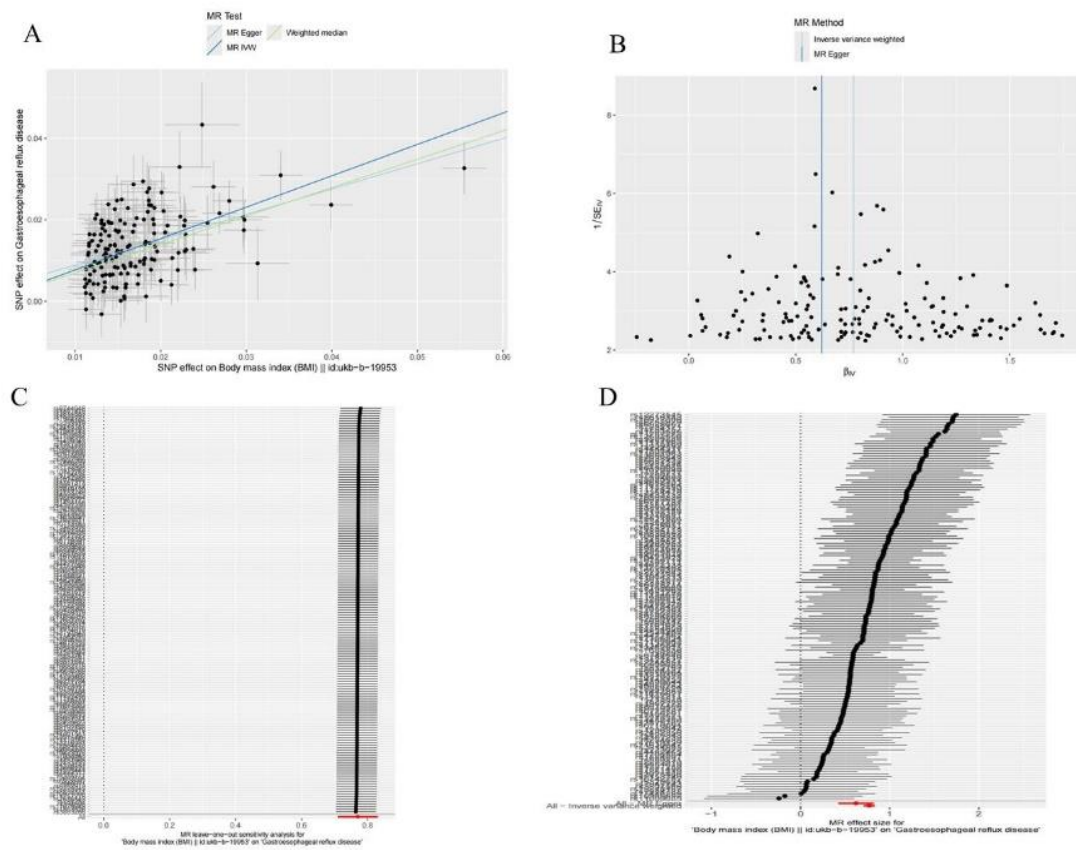


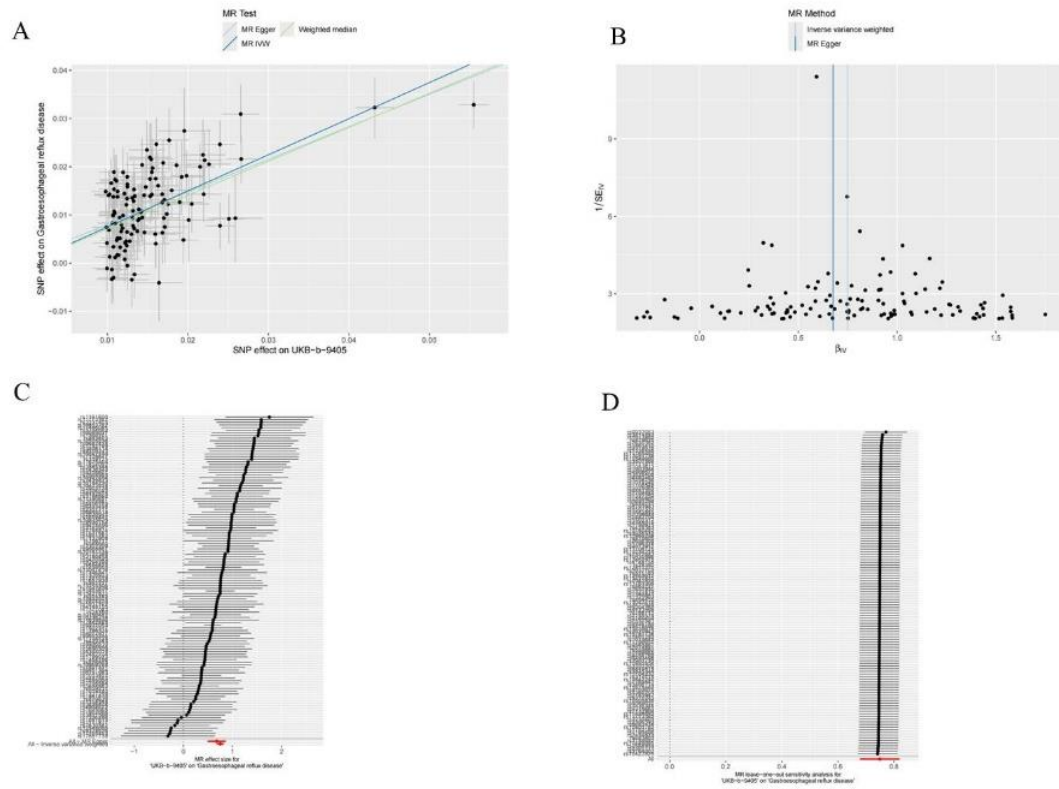
**Supplementary Figure S1.** The causal effect of MetS on GERD risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

MetS – metabolic syndrome, GERD – gastroesophageal reflux disease.

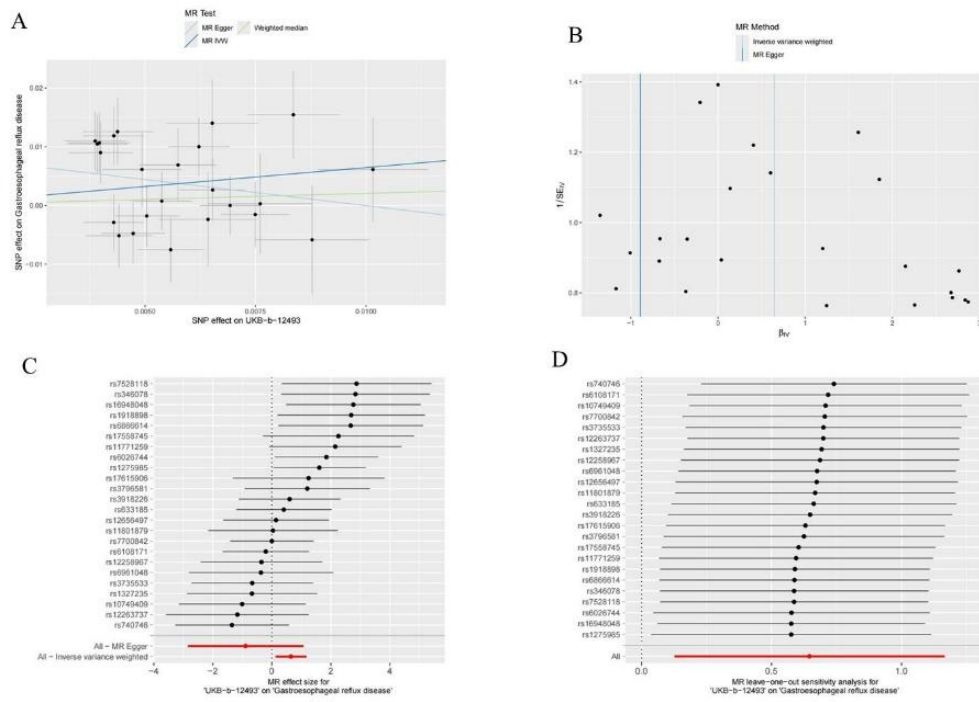


**Supplementary Figure S2.** The causal effect of BMI on GERD risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

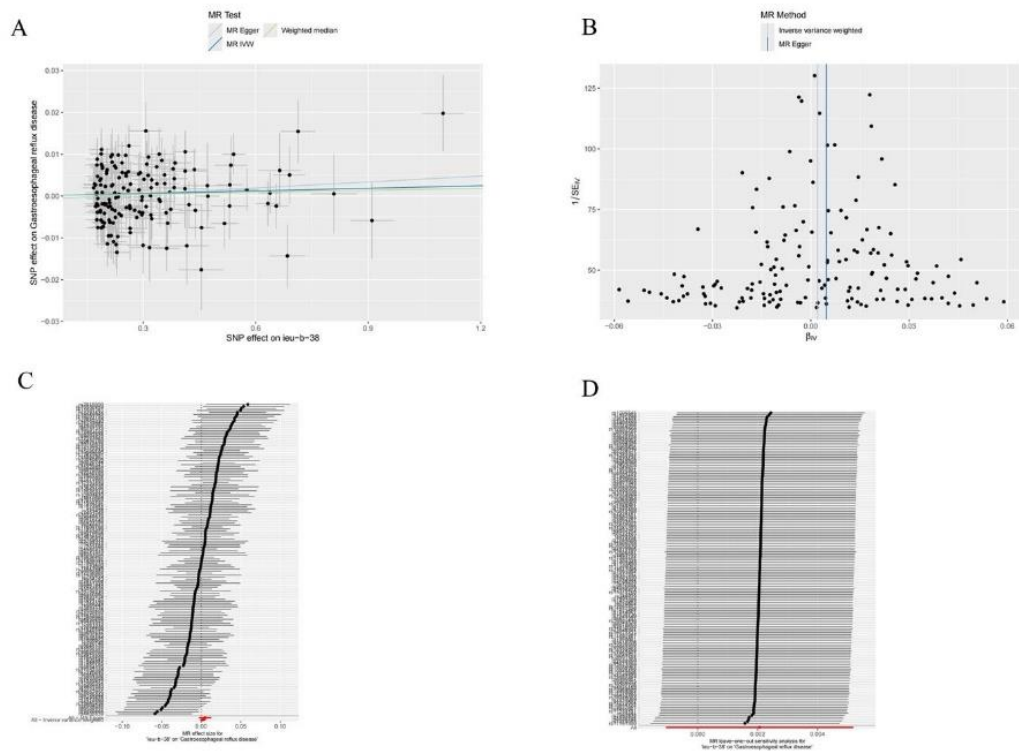
BMI – body mass index, GERD – gastroesophageal reflux disease.



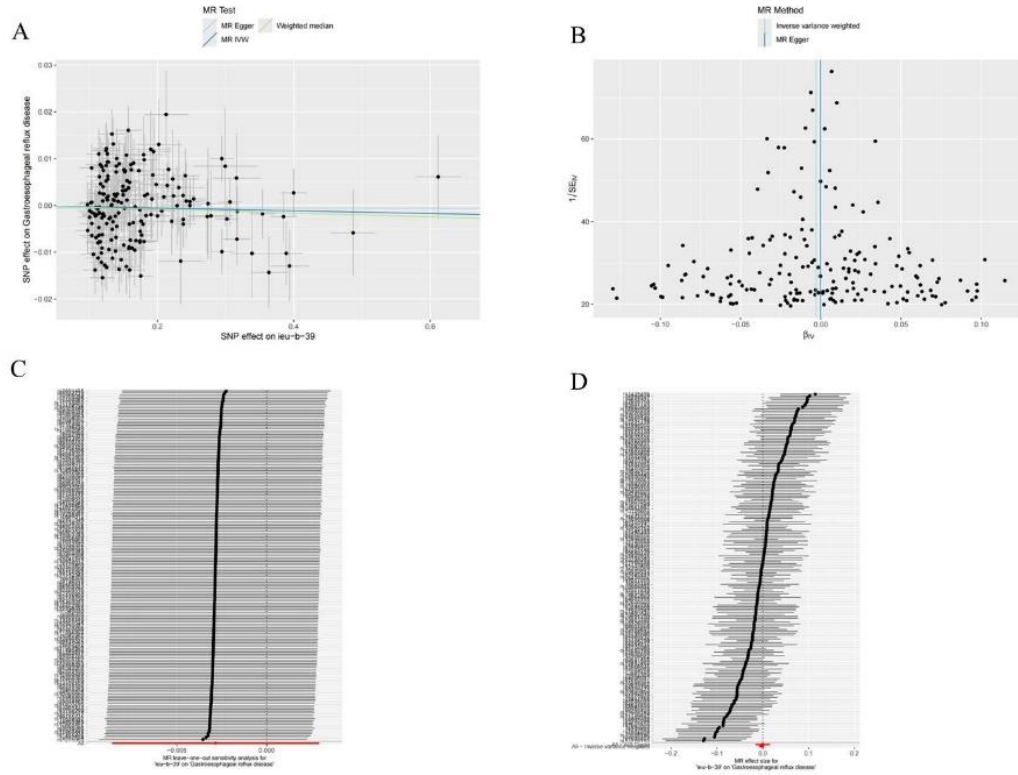
**Supplementary Figure S3.** The causal effect of WC on GERD risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot  
 WC – waist circumference, GERD – gastroesophageal reflux disease.



**Supplementary Figure S4.** The causal effect of hypertension on GERD risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot  
GERD – gastroesophageal reflux disease.

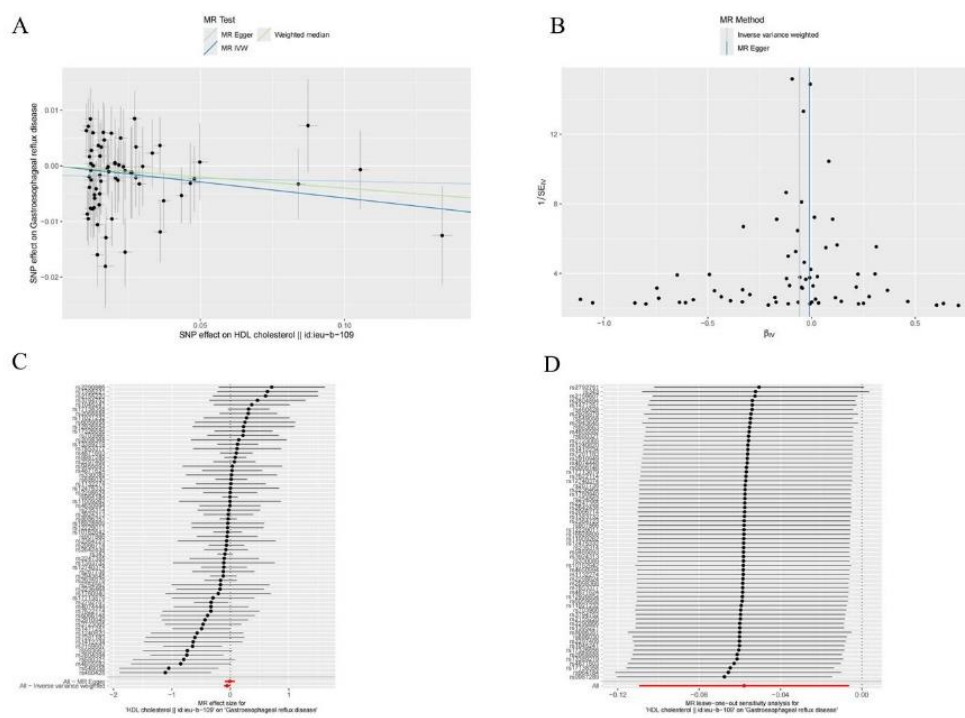


**Supplementary Figure S5.** The causal effect of SBP on GERD risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot  
 SBP – systolic blood pressure, GERD – gastroesophageal reflux disease.



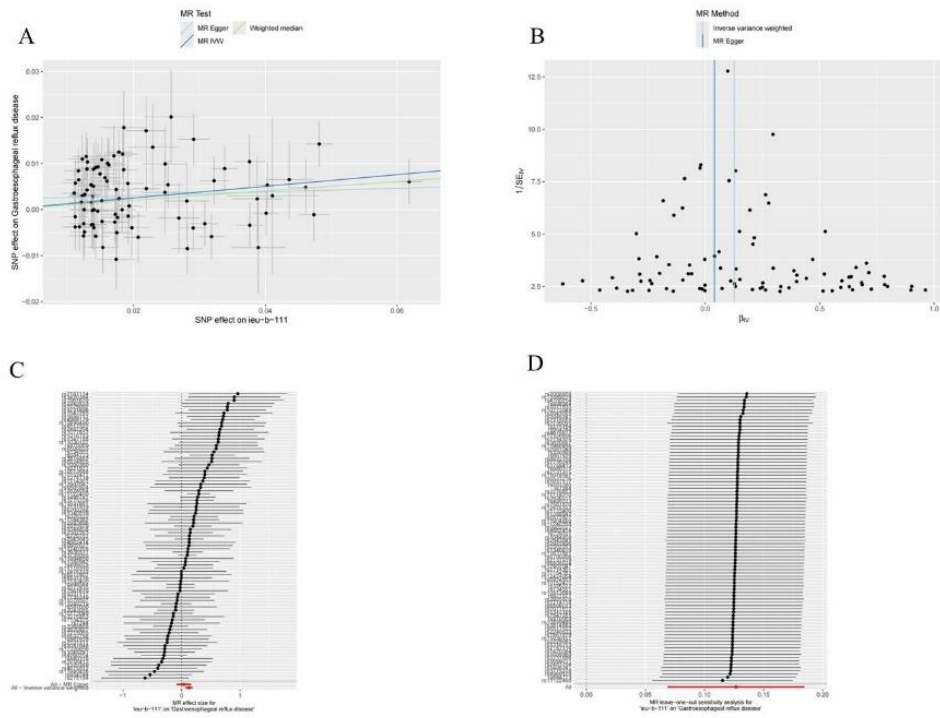
**Supplementary Figure S6.** The causal effect of DBP on GERD risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

DBP – diastolic blood pressure, GERD – gastroesophageal reflux disease.



**Supplementary Figure S7.** The causal effect of HDL on GERD risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

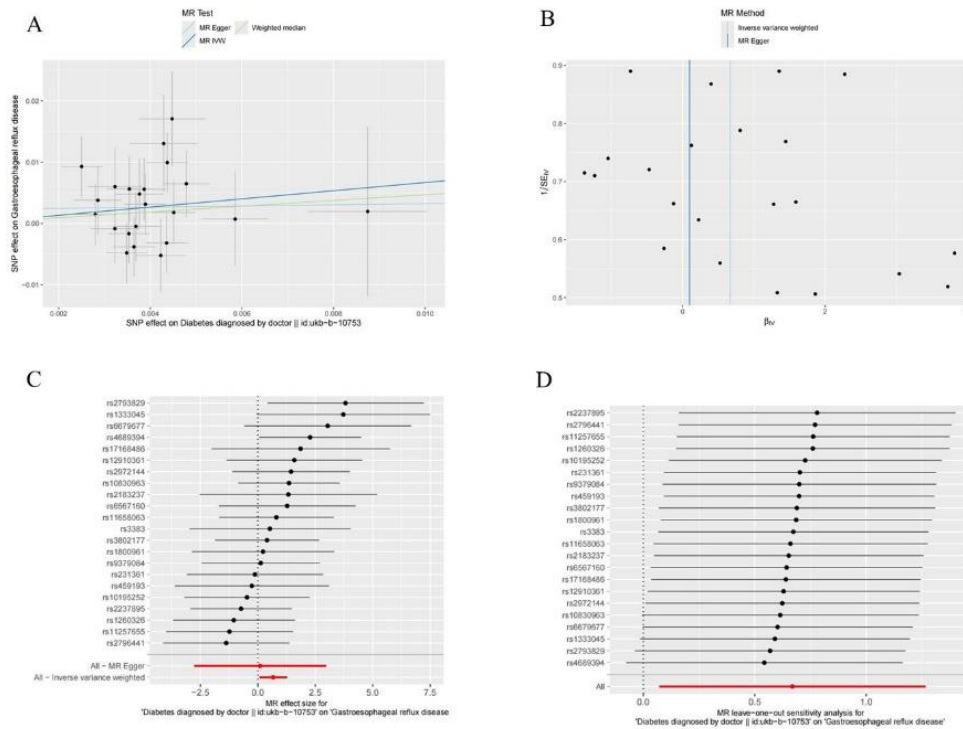
HDL – high-density lipoprotein, GERD – gastroesophageal reflux disease.



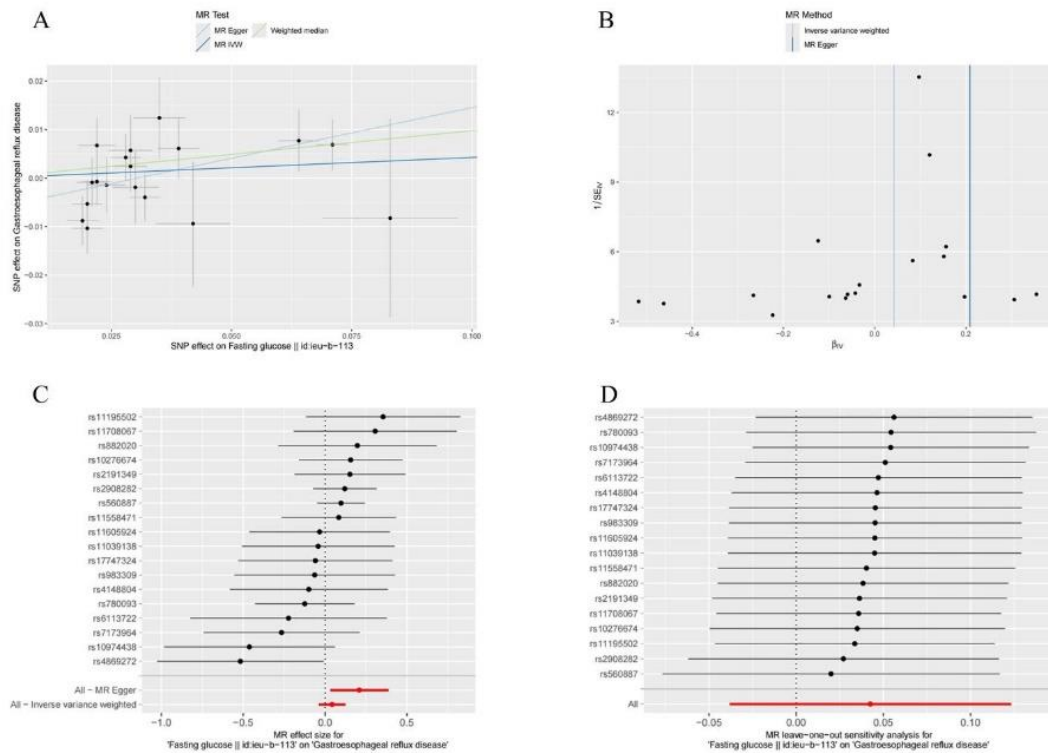
**Supplementary Figure S8.** The causal effect of TG on GERD risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot,

**D** – Leave-one-out plot

TG – triglycerides, GERD – gastroesophageal reflux disease.

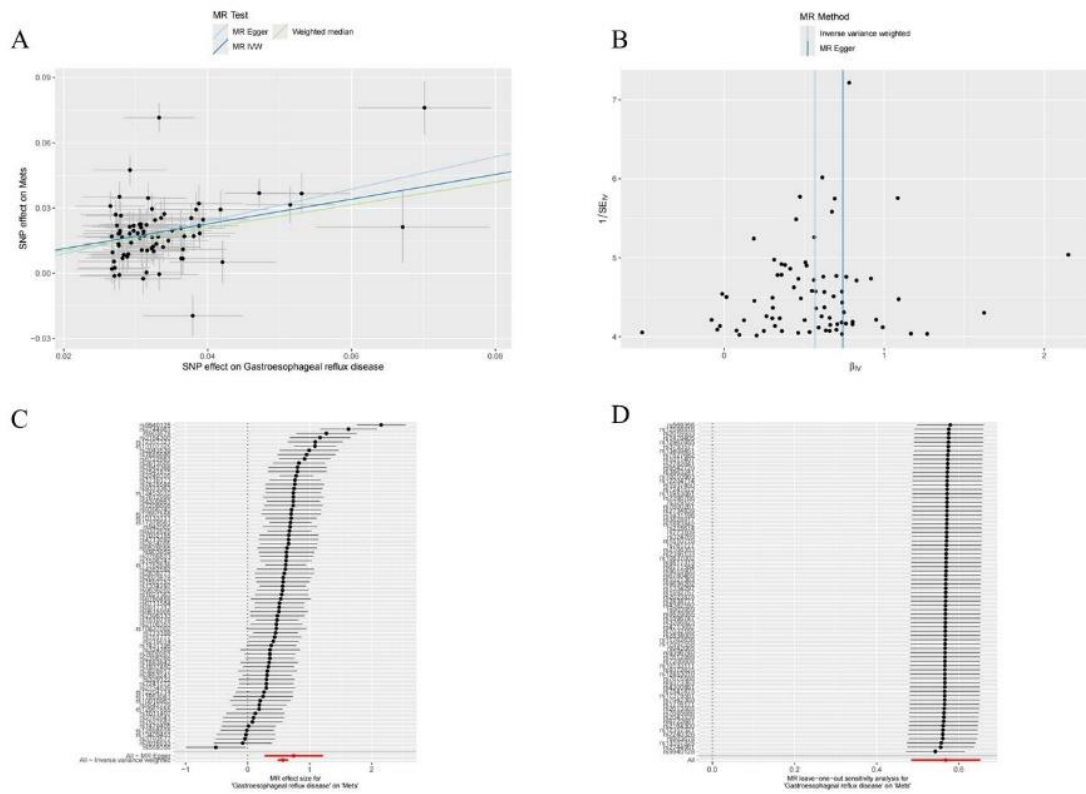


**Supplementary Figure S9.** The causal effect of Type 2 diabetes on GERD risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot  
GERD – gastroesophageal reflux disease.



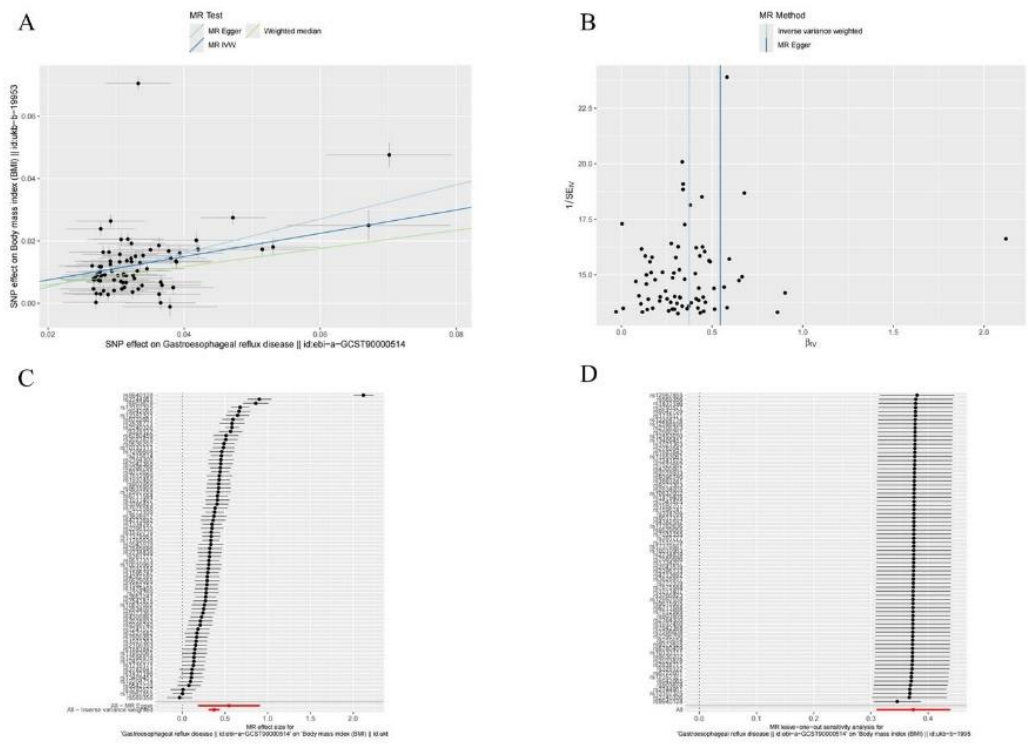
**Supplementary Figure S10.** The causal effect of FBG on GERD risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

FBG – fasting glucose, GERD – gastroesophageal reflux disease.



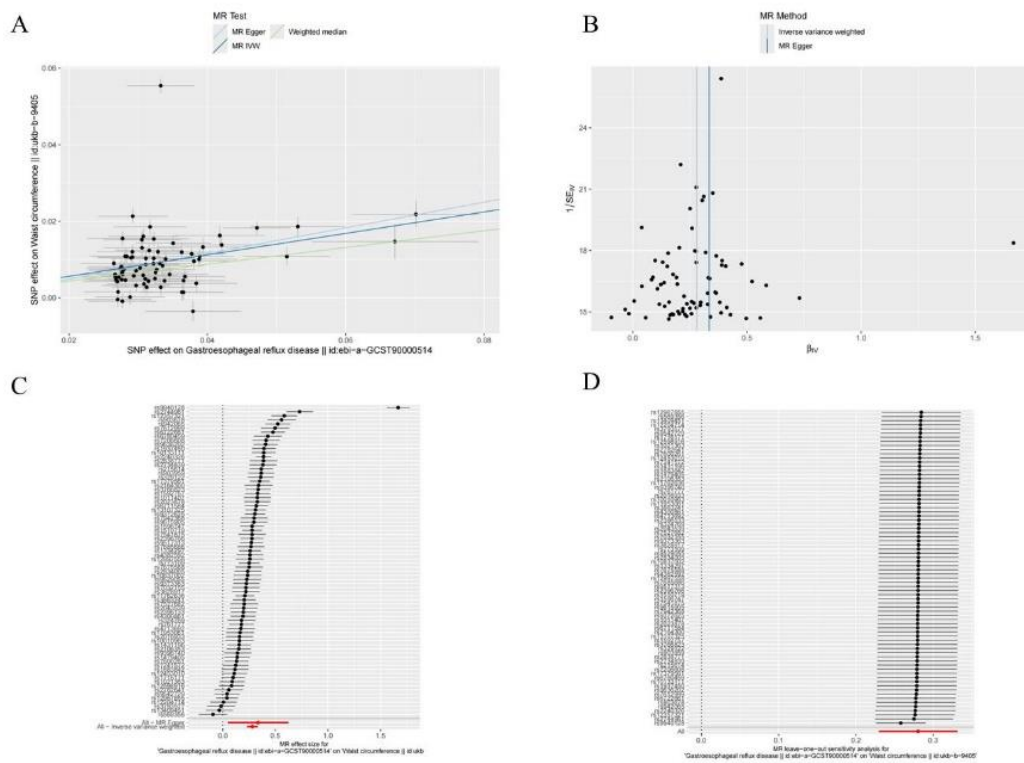
**Supplementary Figure S11.** The causal effect of GERD on MetS risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

MetS – metabolic syndrome, GERD – gastroesophageal reflux disease.



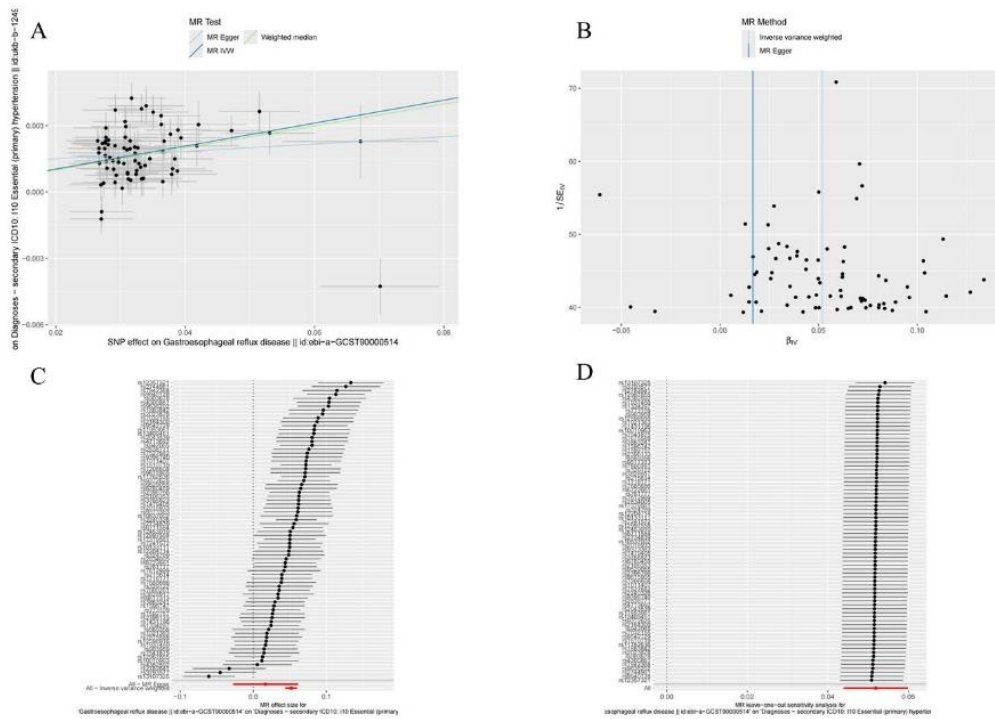
**Supplementary Figure S12.** The causal effect of GERD on BMI risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

BMI – body mass index, GERD – gastroesophageal reflux disease.

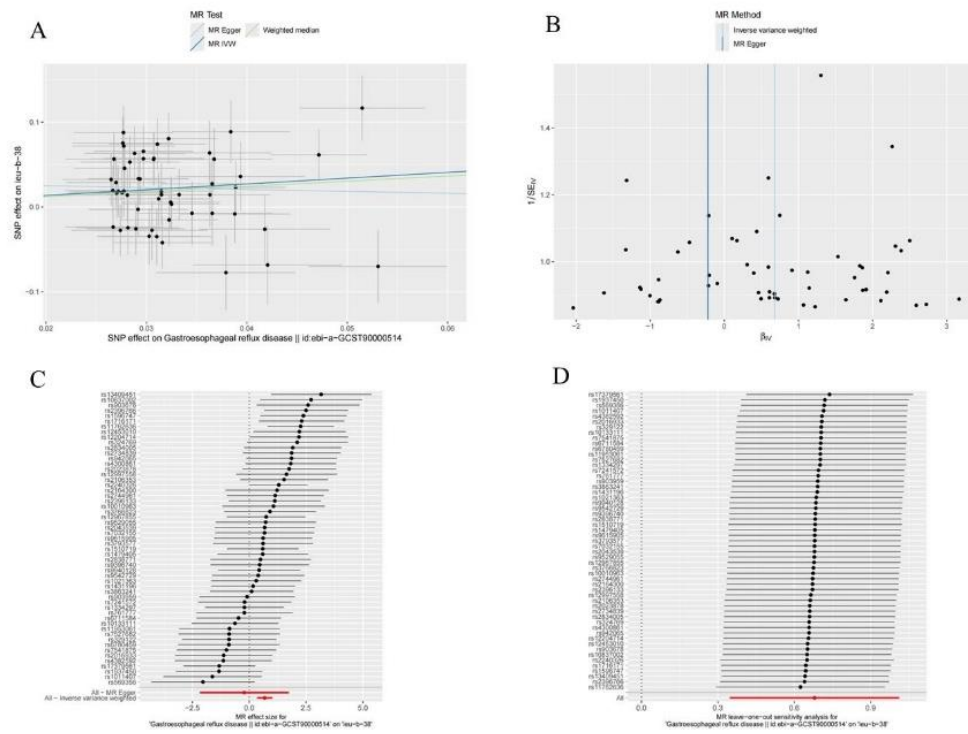


**Supplementary Figure S13.** The causal effect of GERD on WC risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

WC – waist circumference, GERD – gastroesophageal reflux disease.

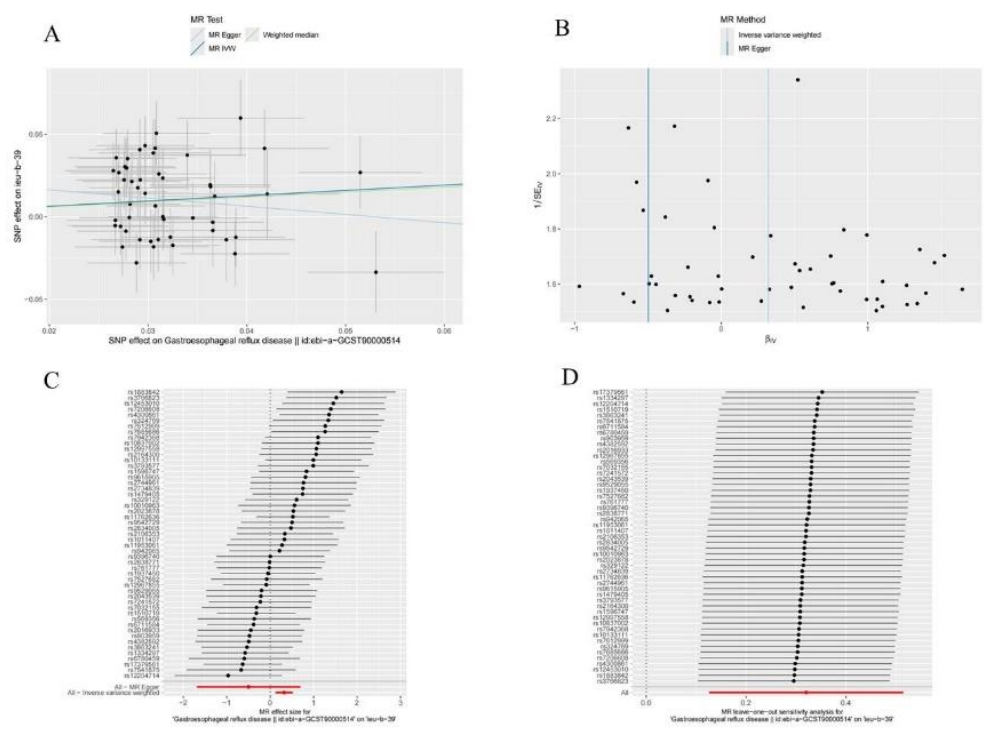


**Supplementary Figure S14.** The causal effect of GERD on hypertension risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot  
 GERD – gastroesophageal reflux disease.



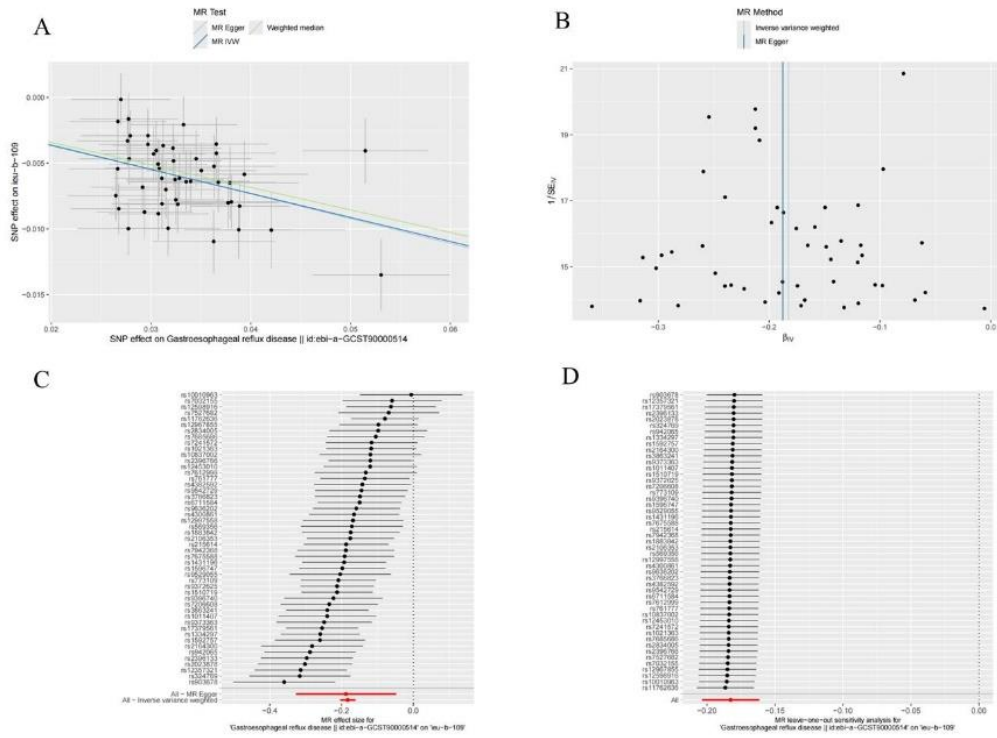
**Supplementary Figure S15.** The causal effect of GERD on SBP risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

SBP – systolic blood pressure, GERD – gastroesophageal reflux disease.



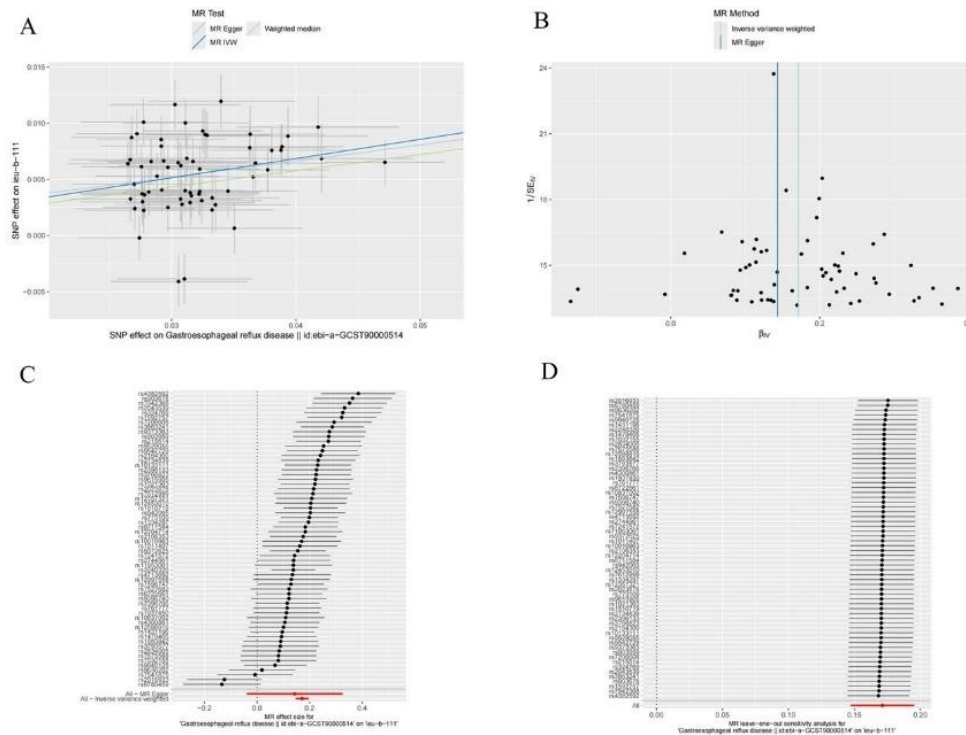
**Supplementary Figure S16.** The causal effect of GERD on DBP risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

DBP – diastolic blood pressure, GERD – gastroesophageal reflux disease.

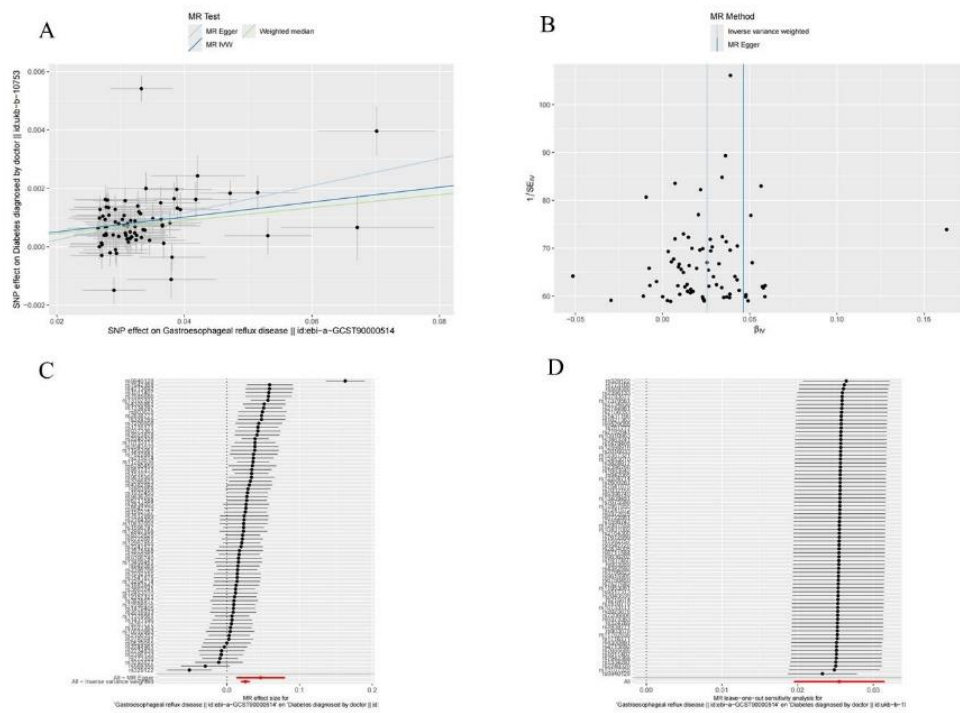


**Supplementary Figure S17.** The causal effect of GERD on HDL risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot

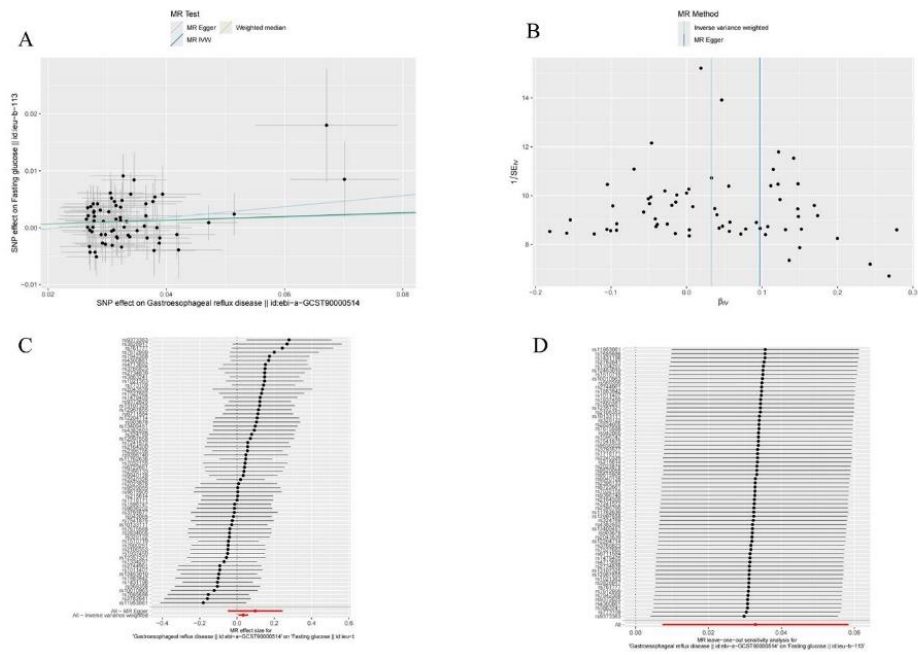
HDL – high-density lipoprotein, GERD – gastroesophageal reflux disease.



**Supplementary Figure S18.** The causal effect of GERD on TG risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot (A) Scatter plot, (B) Funnel plot, (C) Forest plot, and (D) Leave-one-out plot. TG – triglycerides, GERD – gastroesophageal reflux disease.



**Supplementary Figure S19.** The causal effect of GERD on type 2 diabetes risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot  
 GERD – gastroesophageal reflux disease.



**Supplementary Figure S20.** The causal effect of GERD on FBG risk. **A** – Scatter plot, **B** – Funnel plot, **C** – Forest plot, **D** – Leave-one-out plot  
 FBG – fasting glucose, GERD – gastroesophageal reflux disease.