

Supplementary Materials

SUPPLEMENTARY NOTES

Supplementary Figure 1 | The forest plots for causal effect of blood metabolites and metabolite ratios on FH.

Supplementary Figure 2 | The Leave-one-out sensitivity analysis for causal effect of blood metabolites and metabolite ratios on FH.

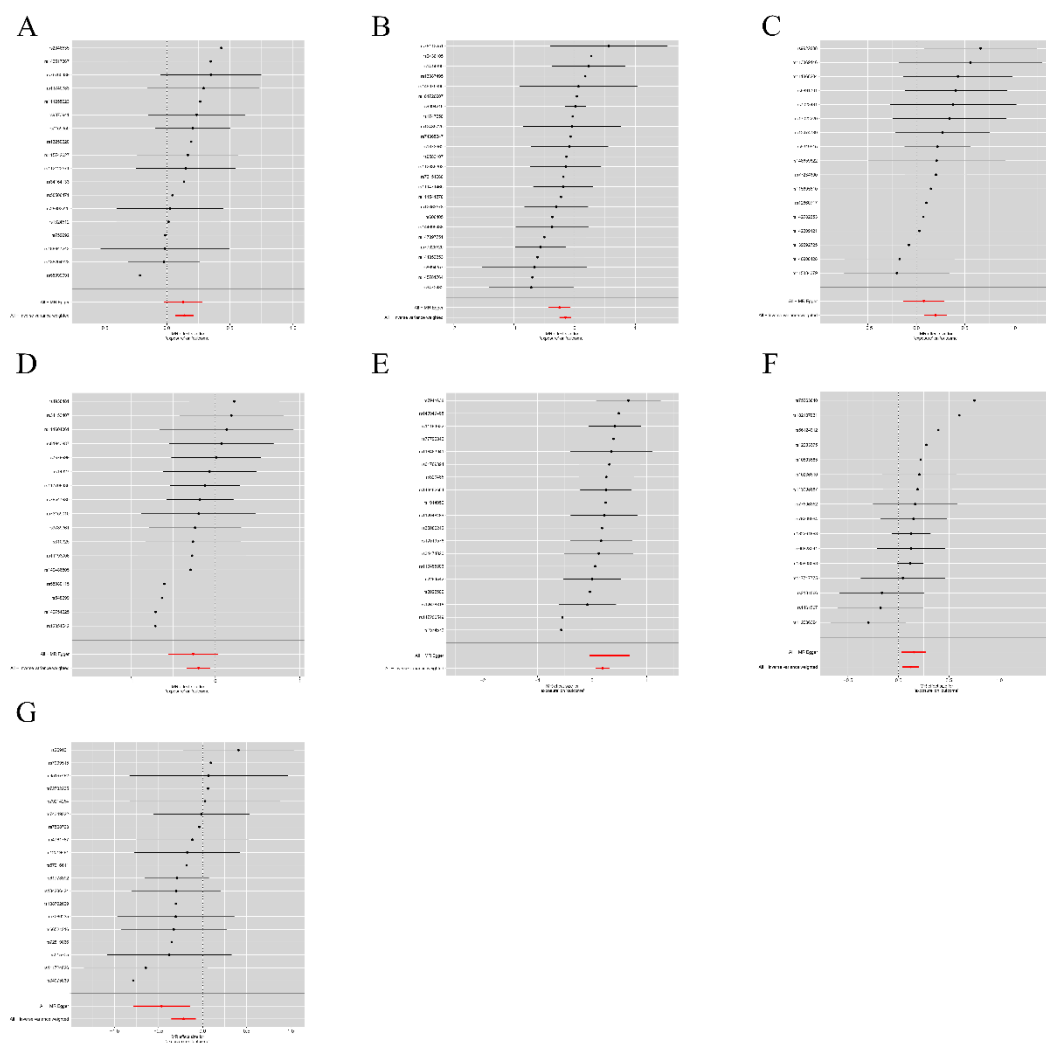
Supplementary Figure 3 | The funnel plot of individual SNP effects of FH on blood metabolites and metabolite ratios.

Supplementary Figure 4 | The forest plots for causal effect of FH on blood metabolites and metabolite ratios.

Supplementary Figure 5 | The Leave-one-out sensitivity analysis for causal effect of FH on blood metabolites and metabolite ratios.

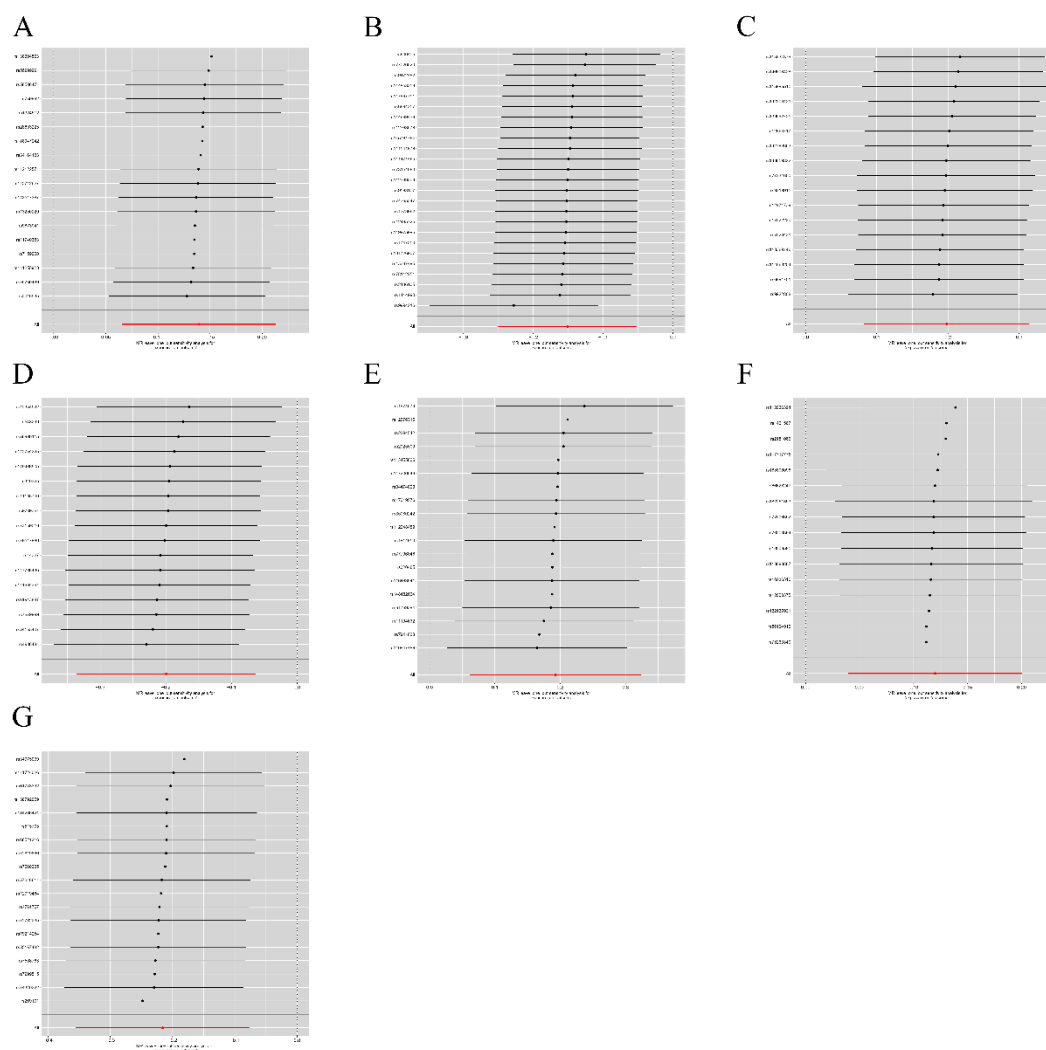
Supplementary Figure 6 | The funnel plot of individual SNP effects of FH on blood metabolites and metabolite ratios.

Supplementary Figure 1 | The forest plots for causal effect of blood metabolites and metabolite ratios on FH.



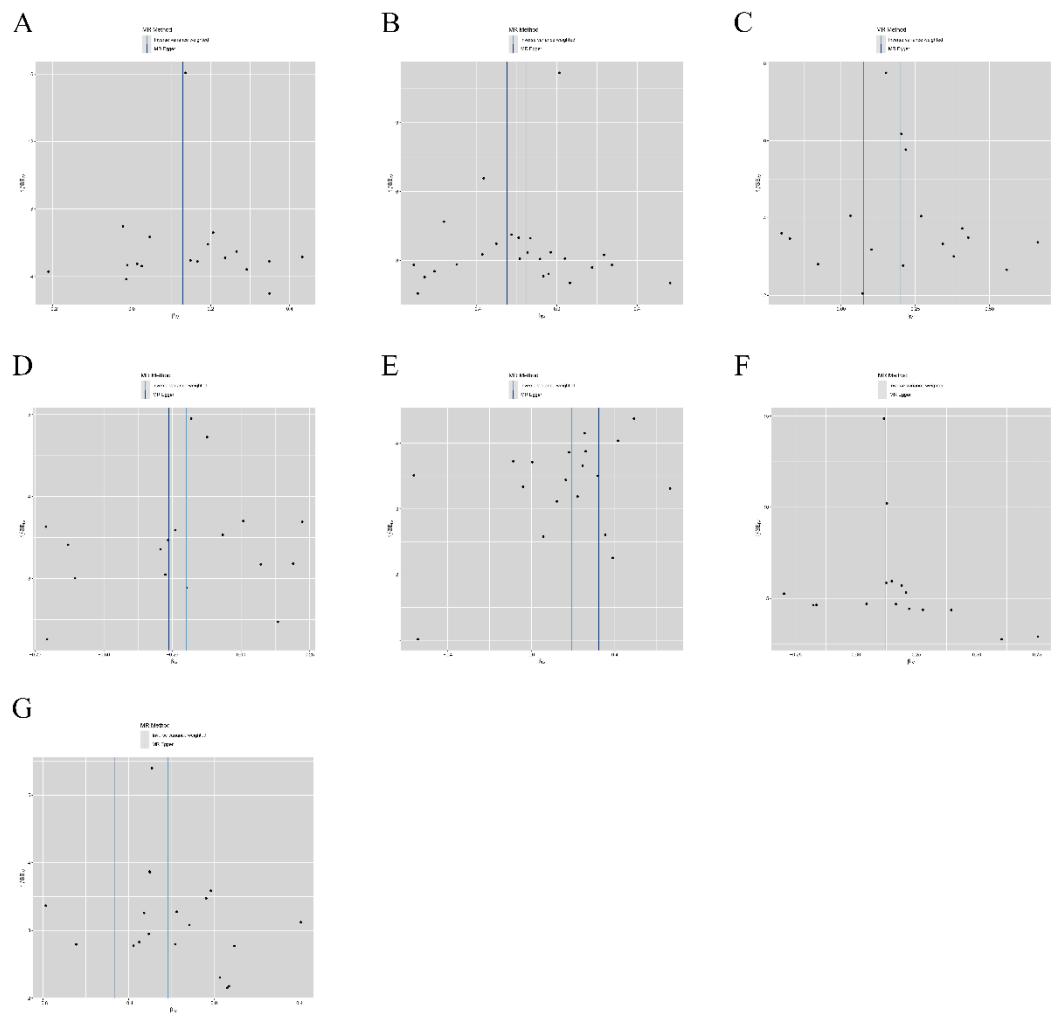
(A) Cholic acid glucuronide levels on FH, (B) Urate levels on FH, (C) X-11299 levels on FH, (D) X-12906 levels on FH, (E) X-24970 levels on FH, (F) Adenosine 5'-diphosphate (ADP) to phosphate ratio on FH, (G) Glycerol to glycerol 3-phosphate ratio on FH.

Supplementary Figure 2 | The Leave-one-out sensitivity analysis for causal effect of blood metabolites and metabolite ratios on FH.



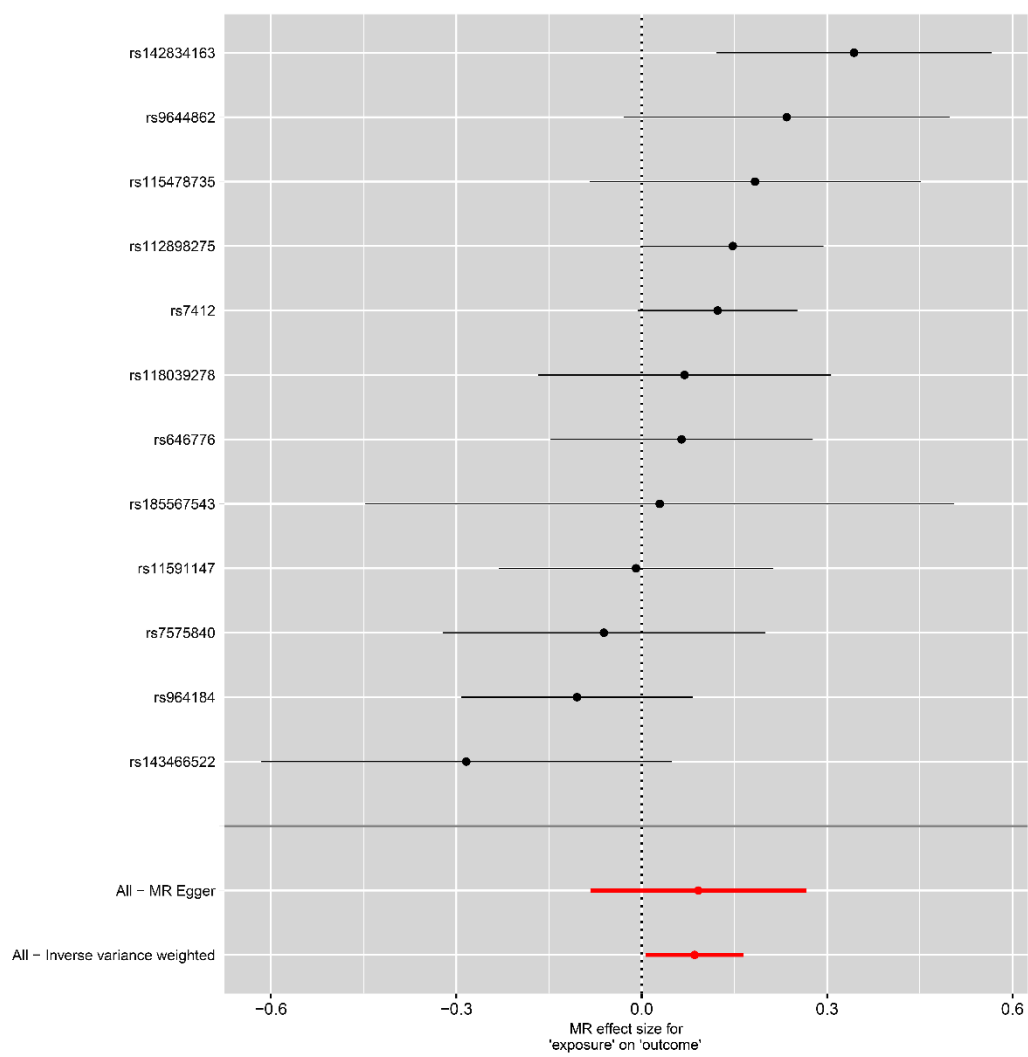
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Supplementary Figure 3 | The funnel plot of individual SNP effects of FH on blood metabolites and metabolite ratios.



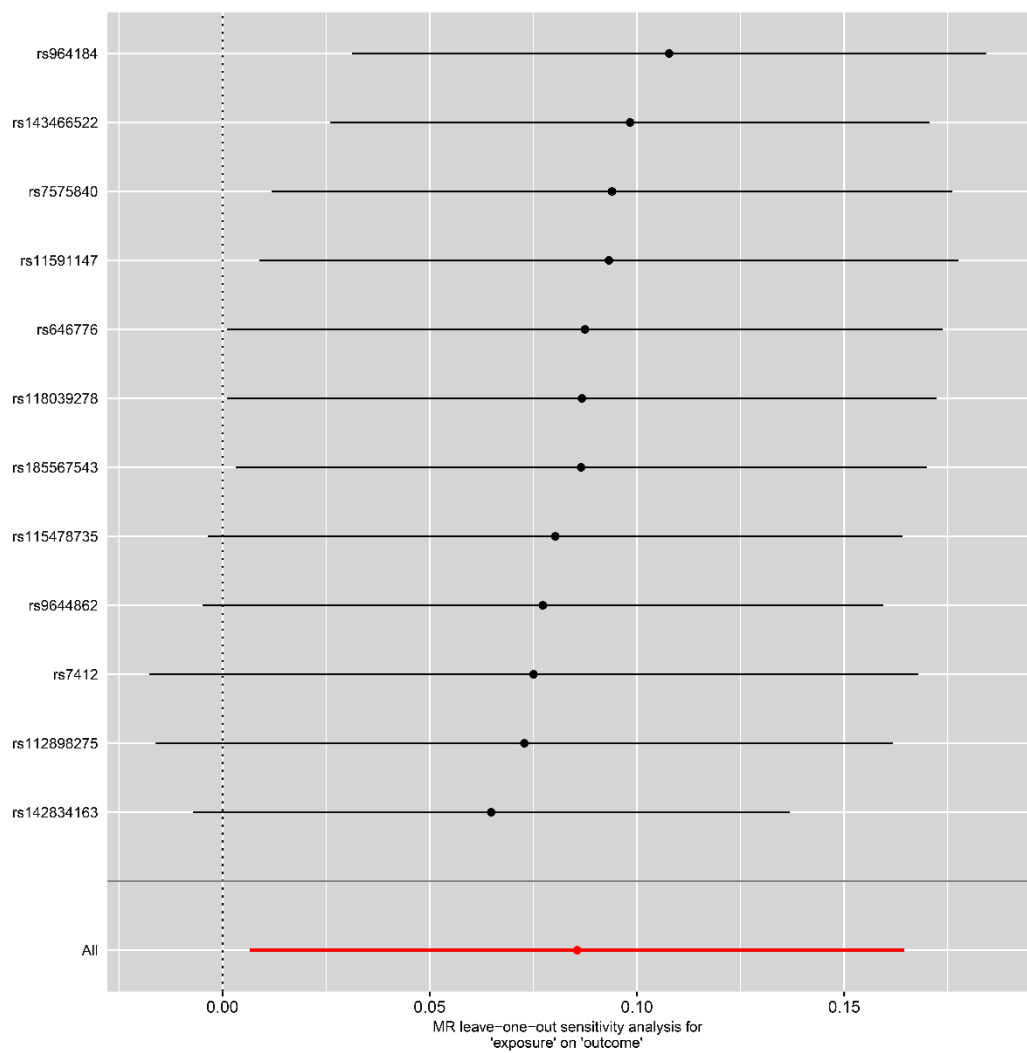
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Supplementary Figure 4 | The forest plots for causal effect of FH on blood metabolites and metabolite ratios.



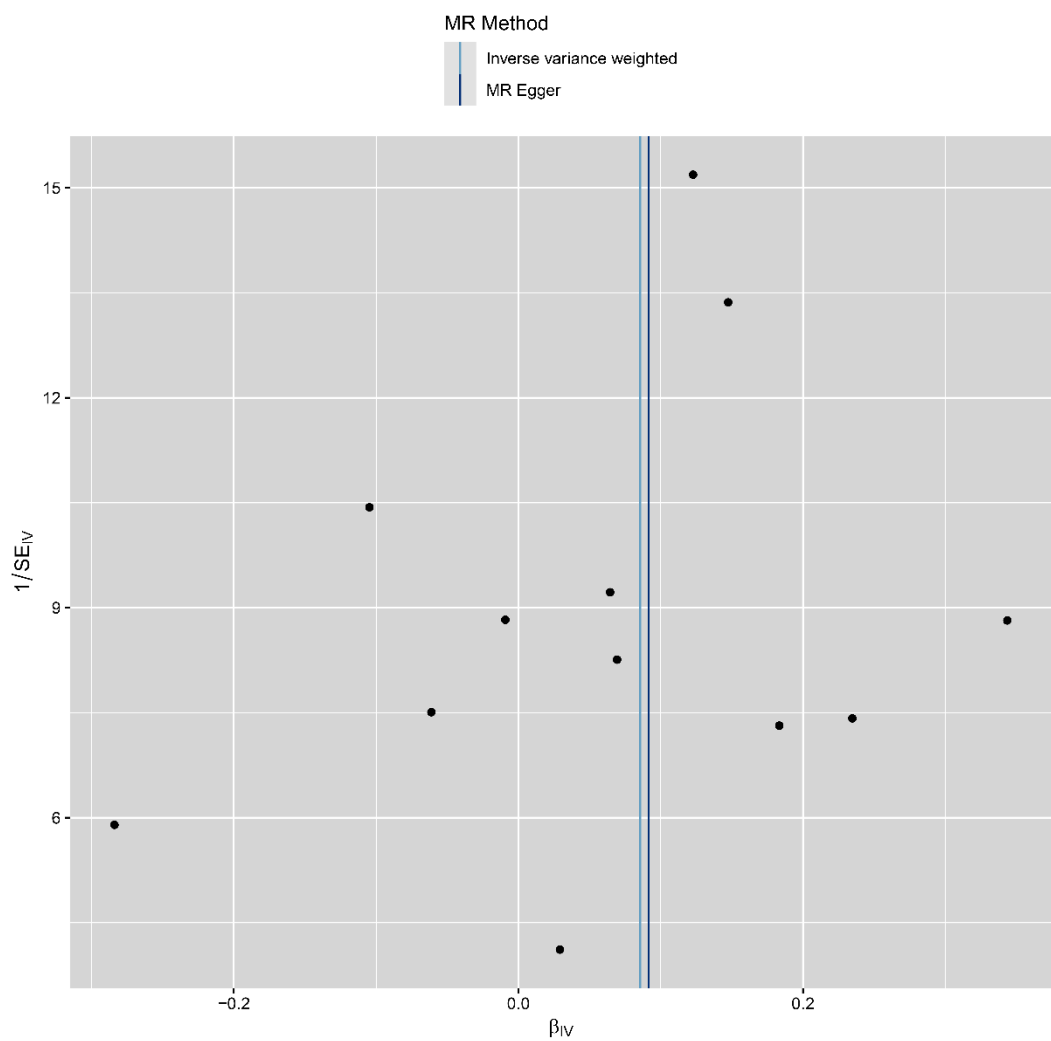
FH on X-24970 levels.

Supplementary Figure 5 | The Leave-one-out sensitivity analysis for causal effect of FH on blood metabolites and metabolite ratios.



FH on X-24970 levels.

Supplementary Figure 6 | The funnel plot of individual SNP effects of FH on blood metabolites and metabolite ratios.



FH on X-24970 levels.