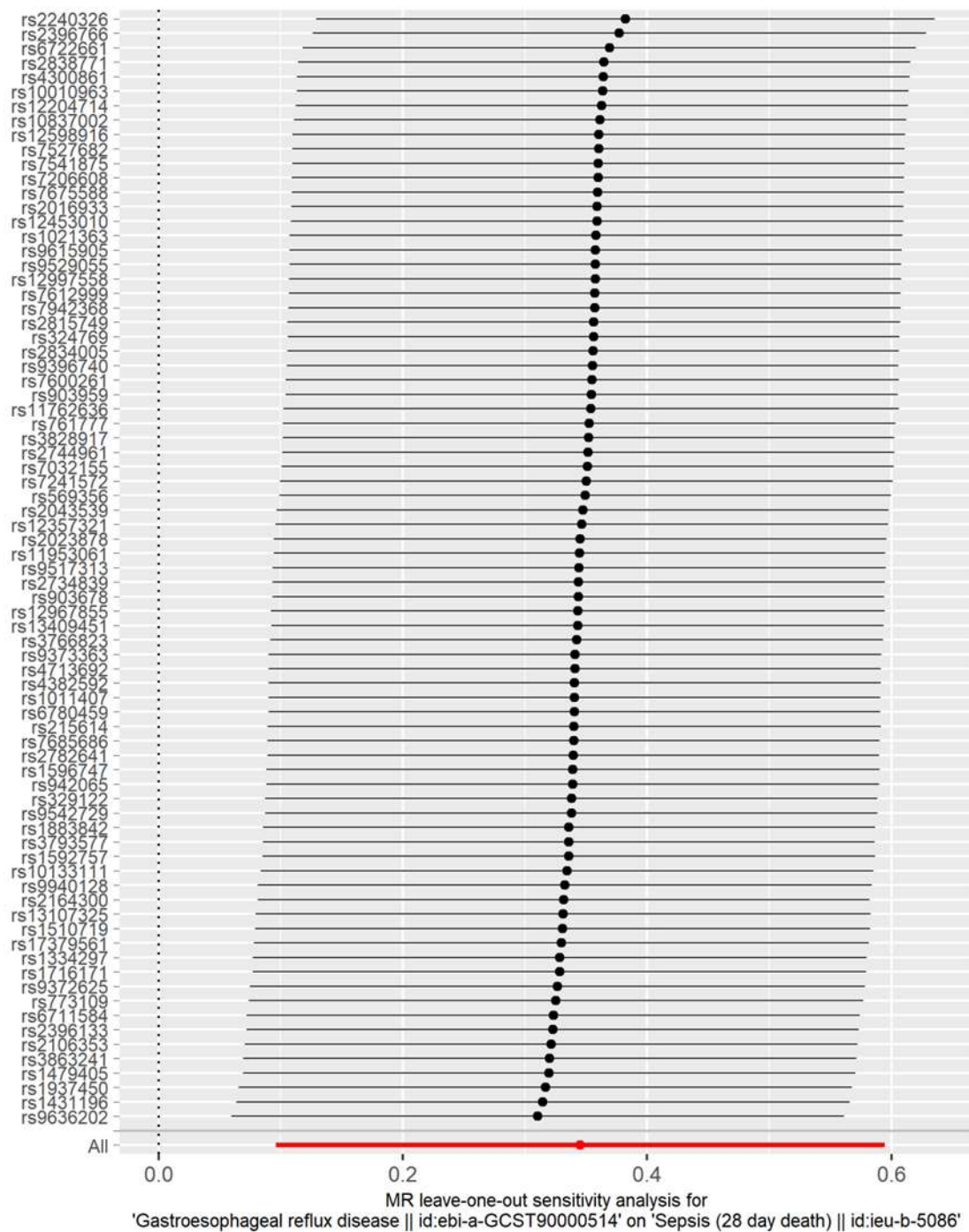
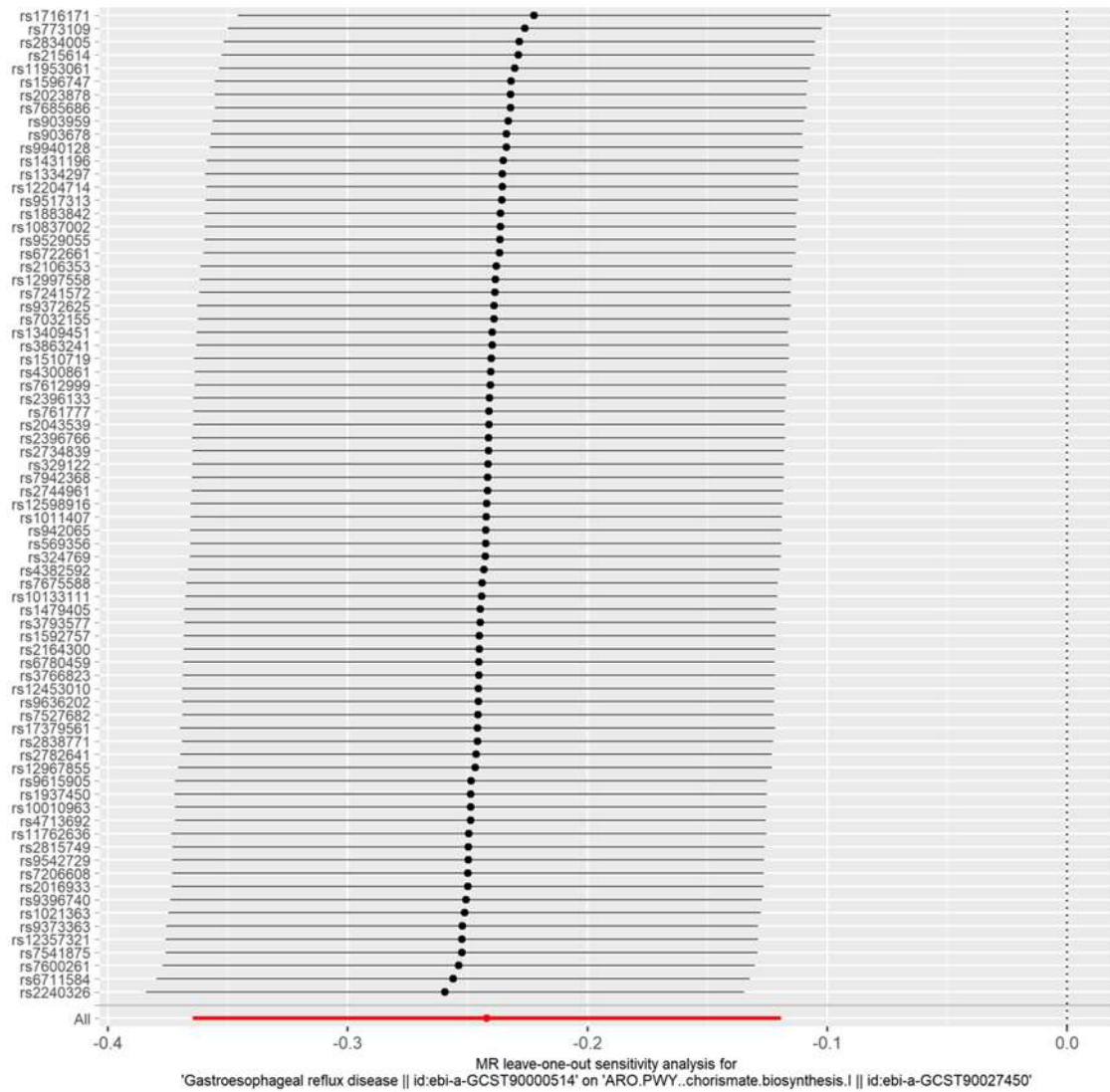


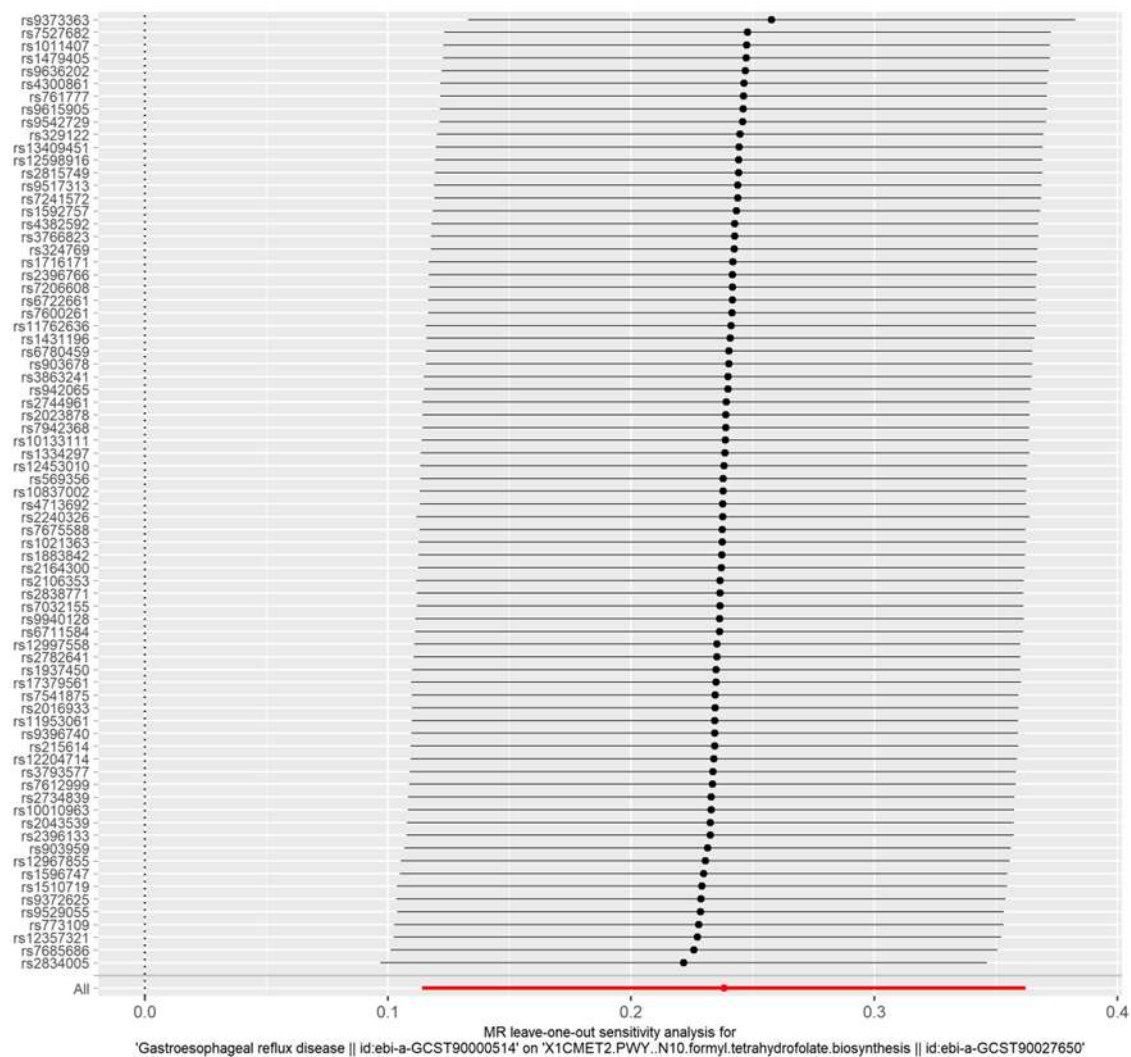
Supplementary Figure 1: Leave-one-out plot of SNPs related to GERD and sepsis.



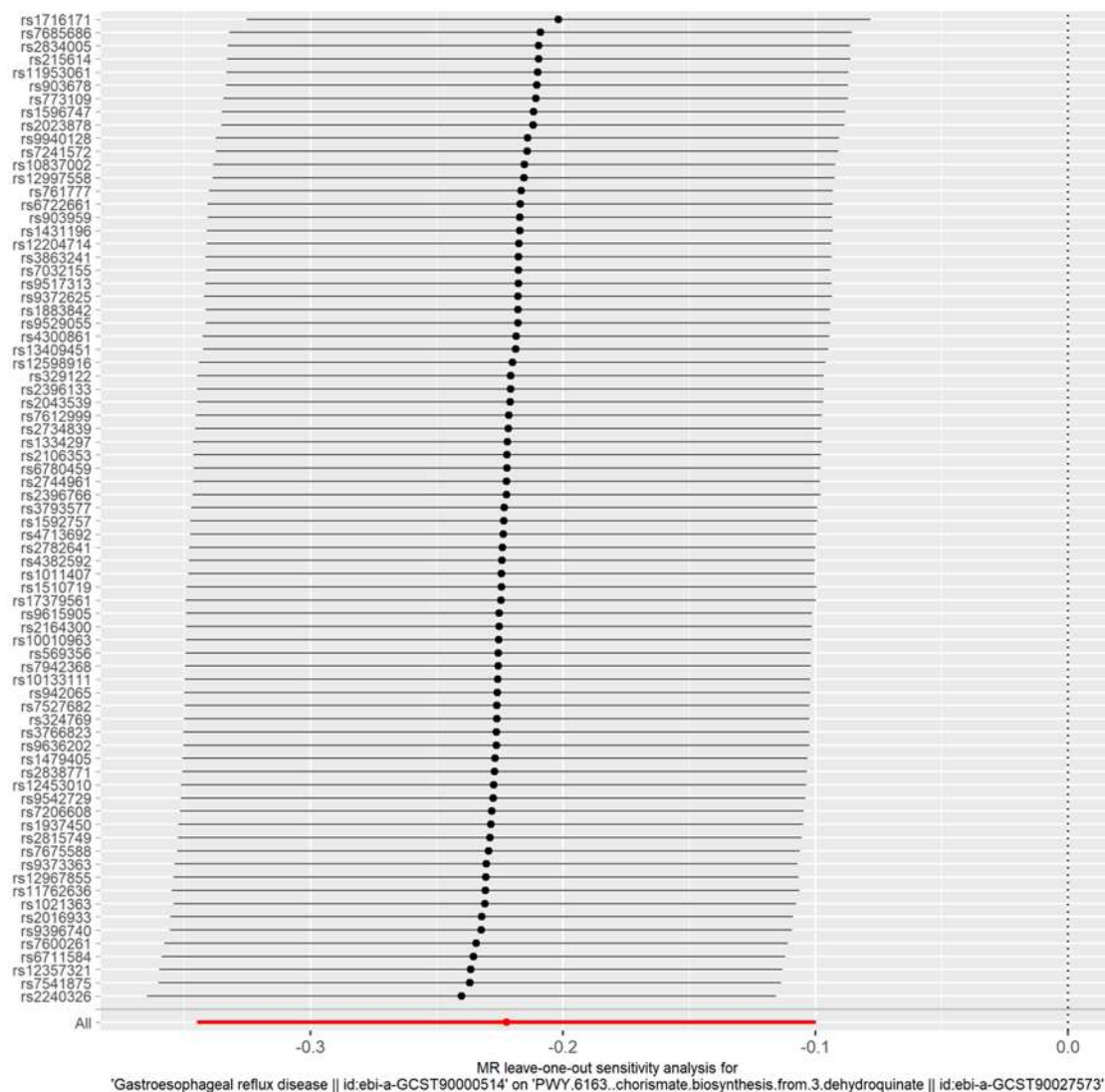
Supplementary Figure 2: Leave-one-out plot of SNPs related to GERD and sepsis (28 day death).



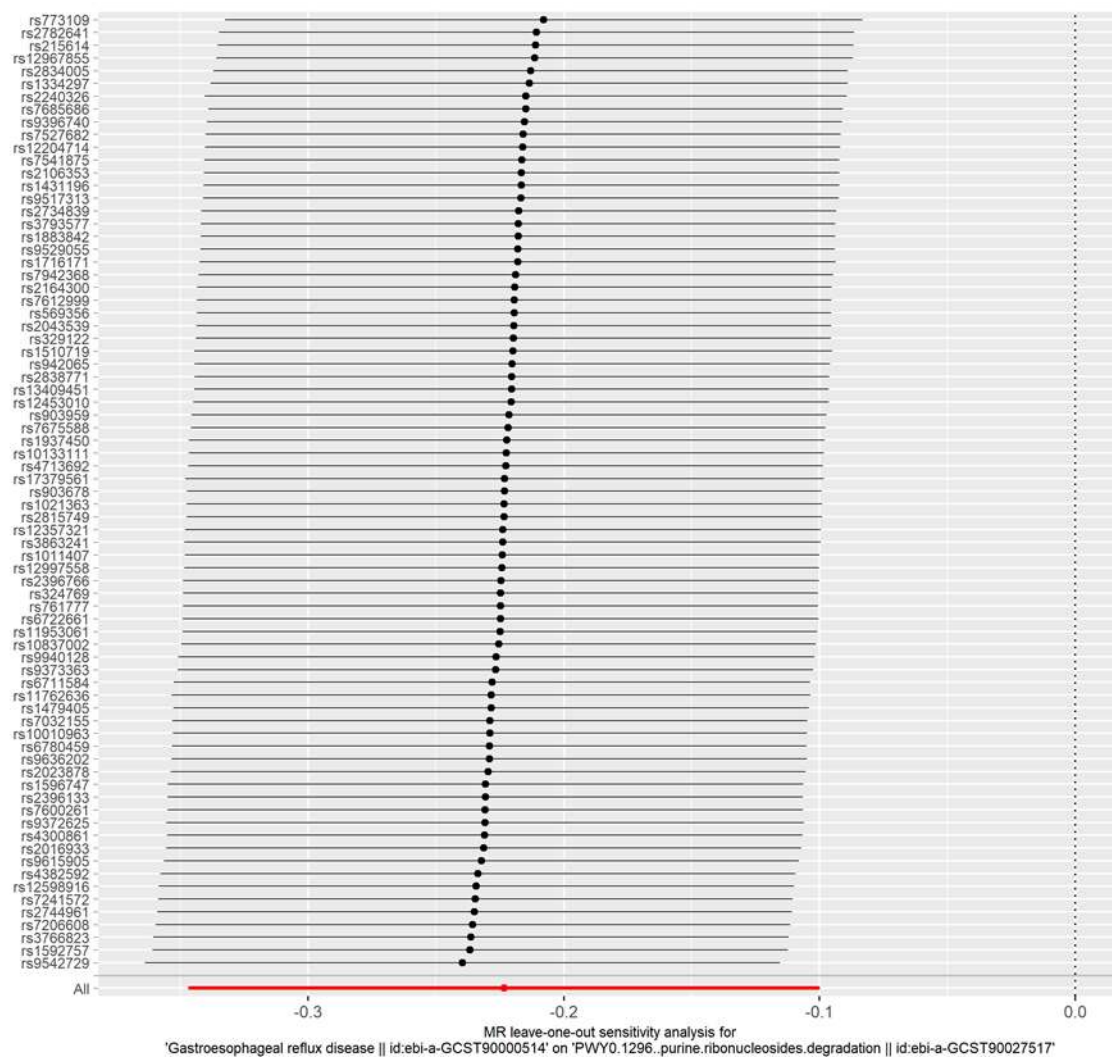
Supplementary Figure 3: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (ARO.PWY..chorismate.biosynthesis.I).



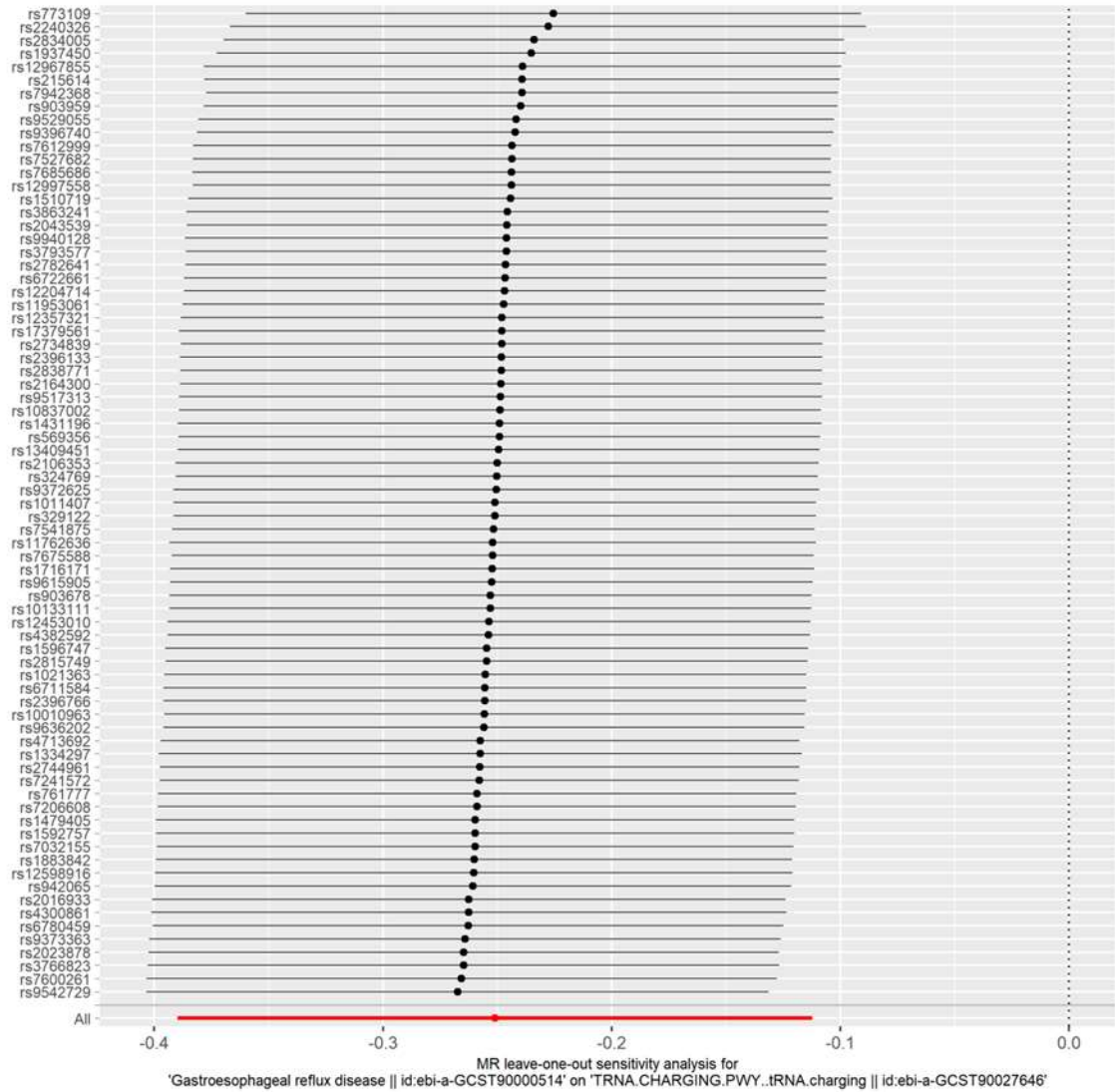
Supplementary Figure 4: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (X1CMET2.PWY..N10.formyl.tetrahydrofolate.biosynthesis).



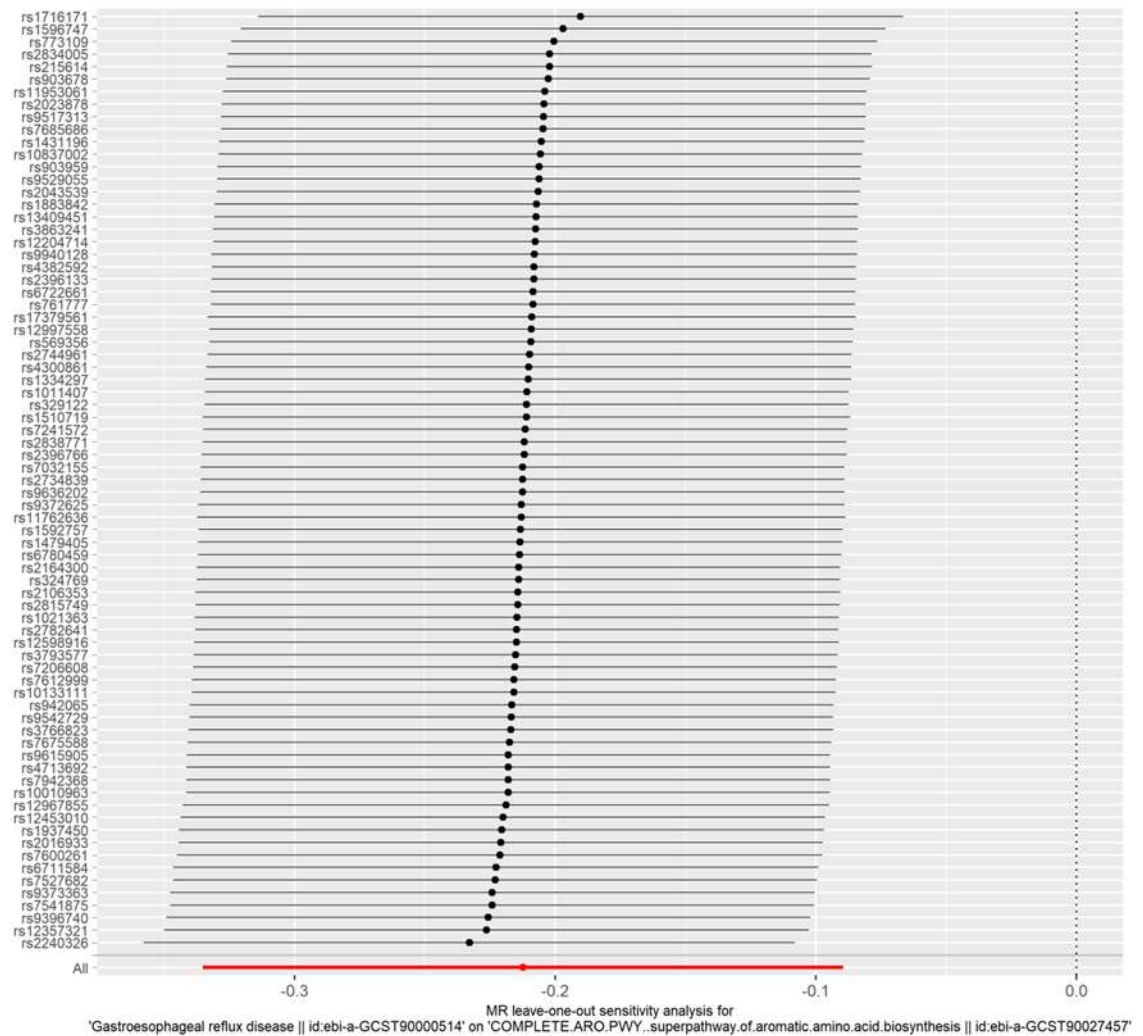
Supplementary Figure 5: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (PWY.6163..chorismate.biosynthesis.from.3.dehydroquinase).



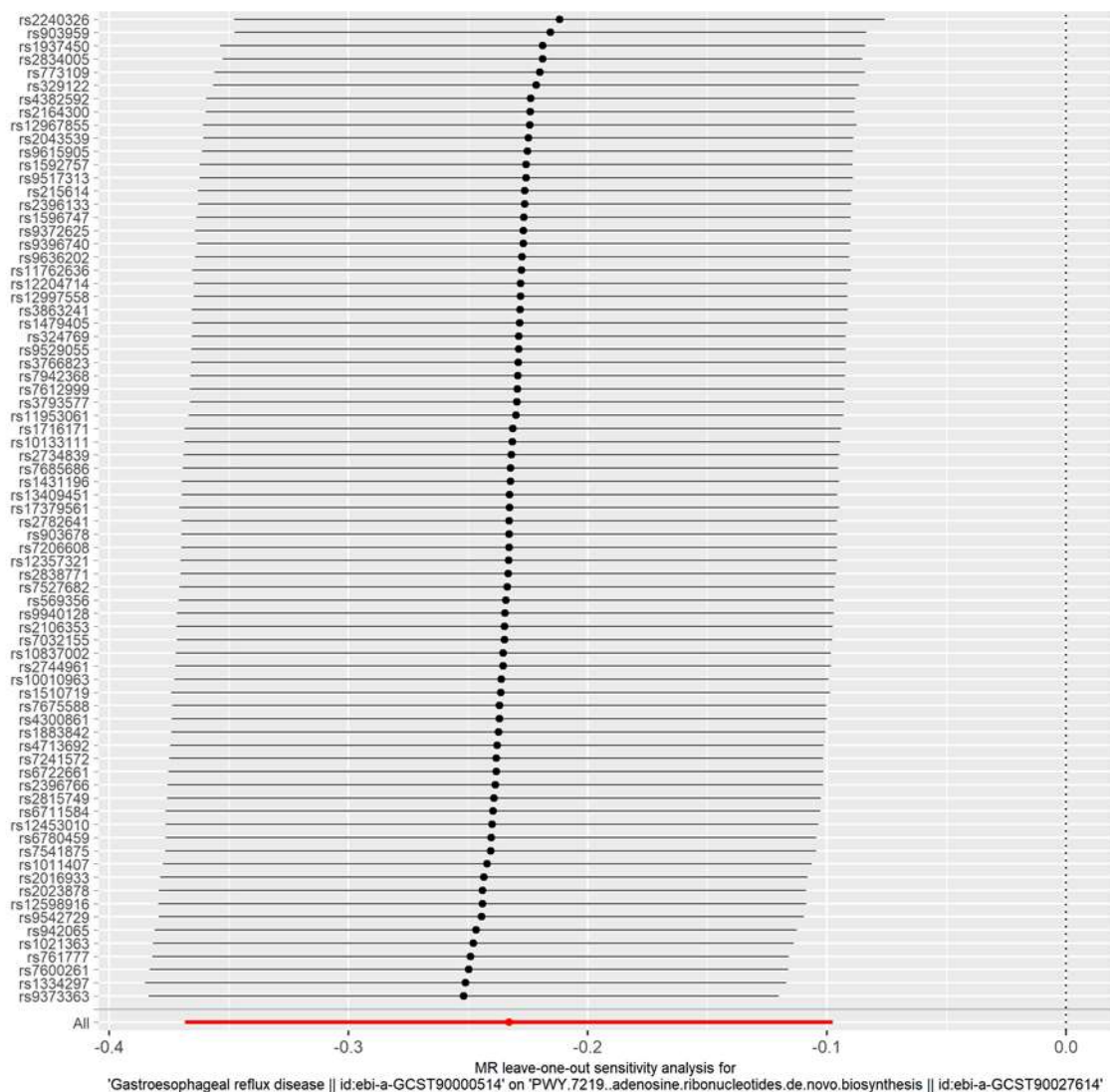
Supplementary Figure 6: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (PWY0.1296..purine.ribonucleosides.degradation).



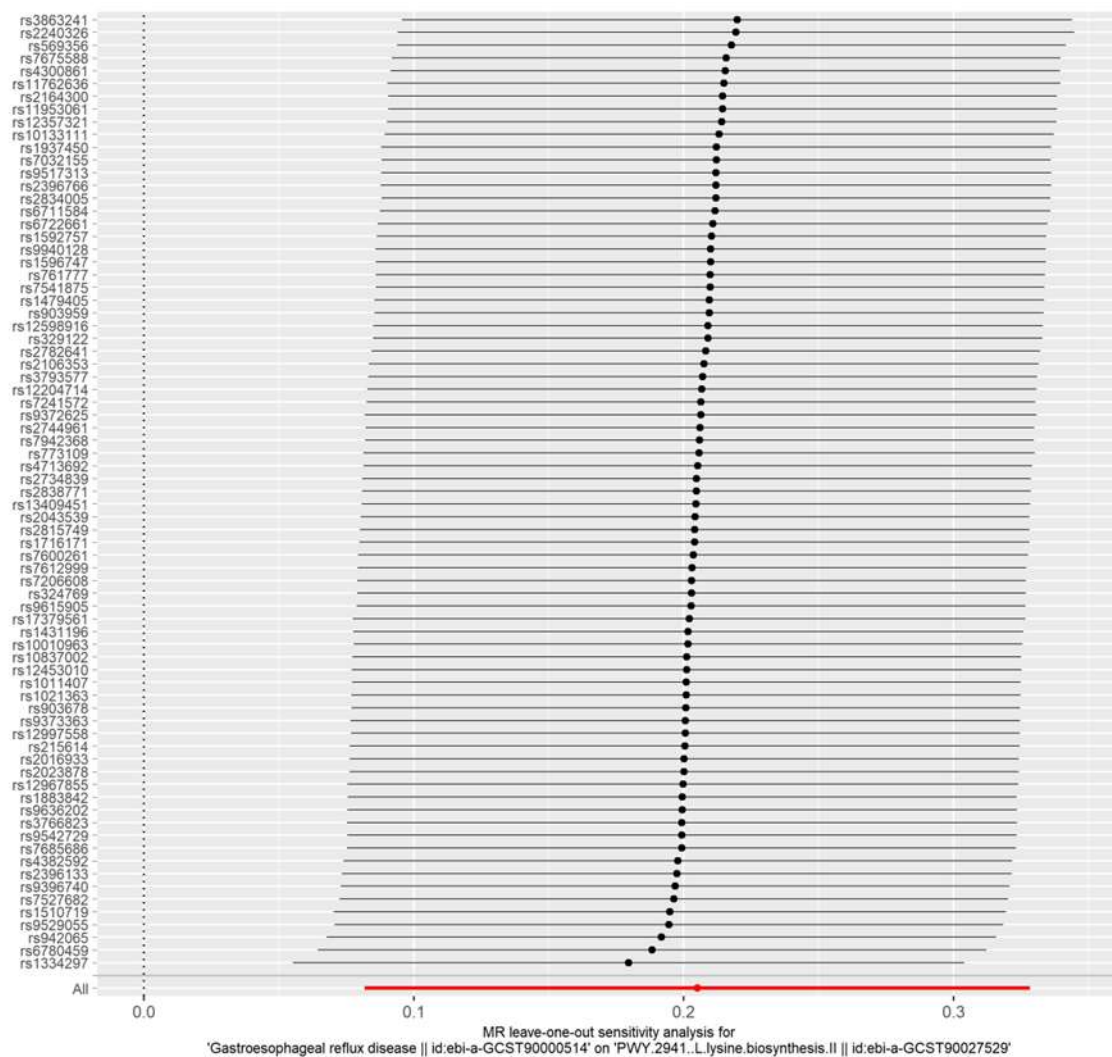
Supplementary Figure 7: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (TRNA.CHARGING.PWY..tRNA.charging).



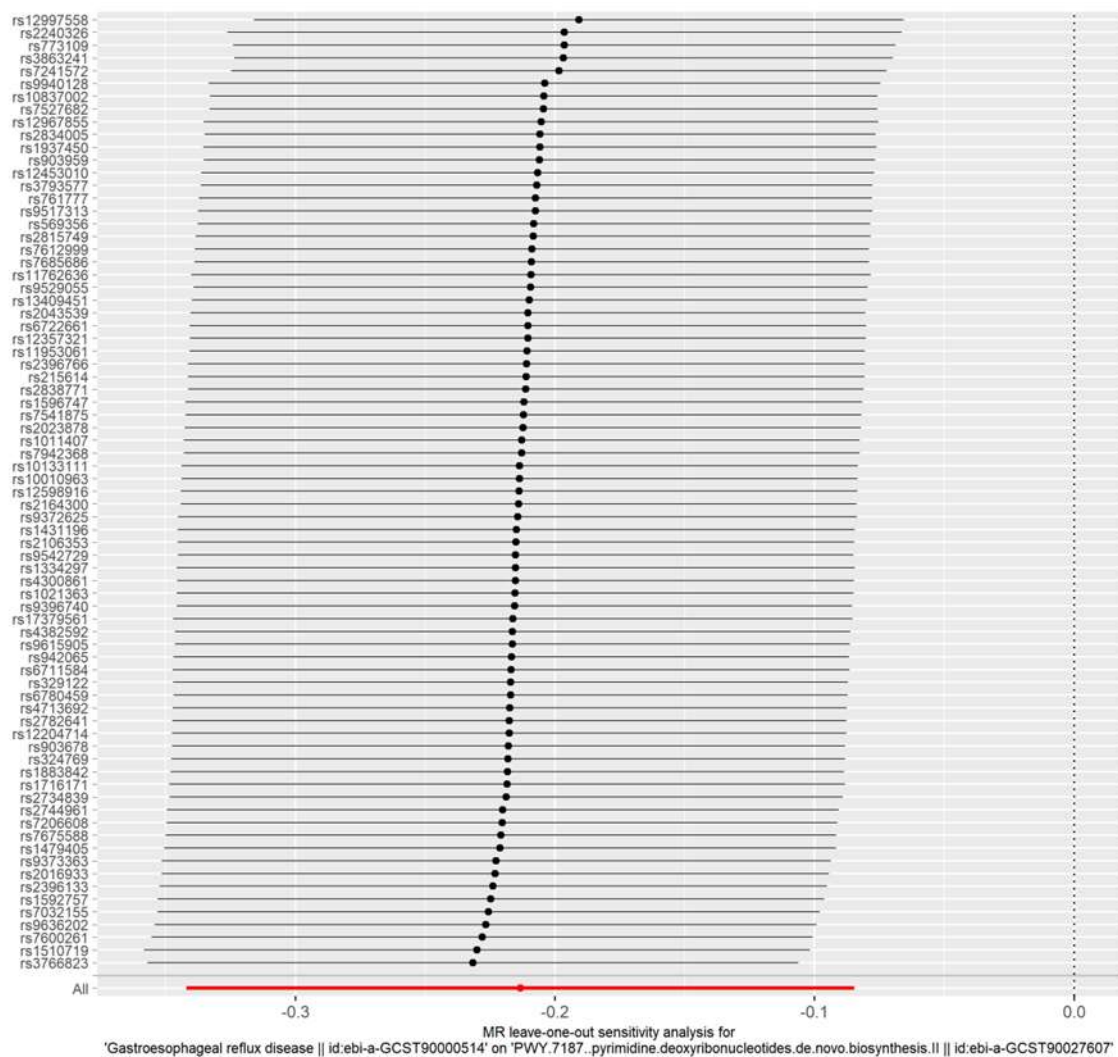
Supplementary Figure 8: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (COMPLETE.ARO.PWY..superpathway.of.aromatic.amino.acid.biosynthesis).



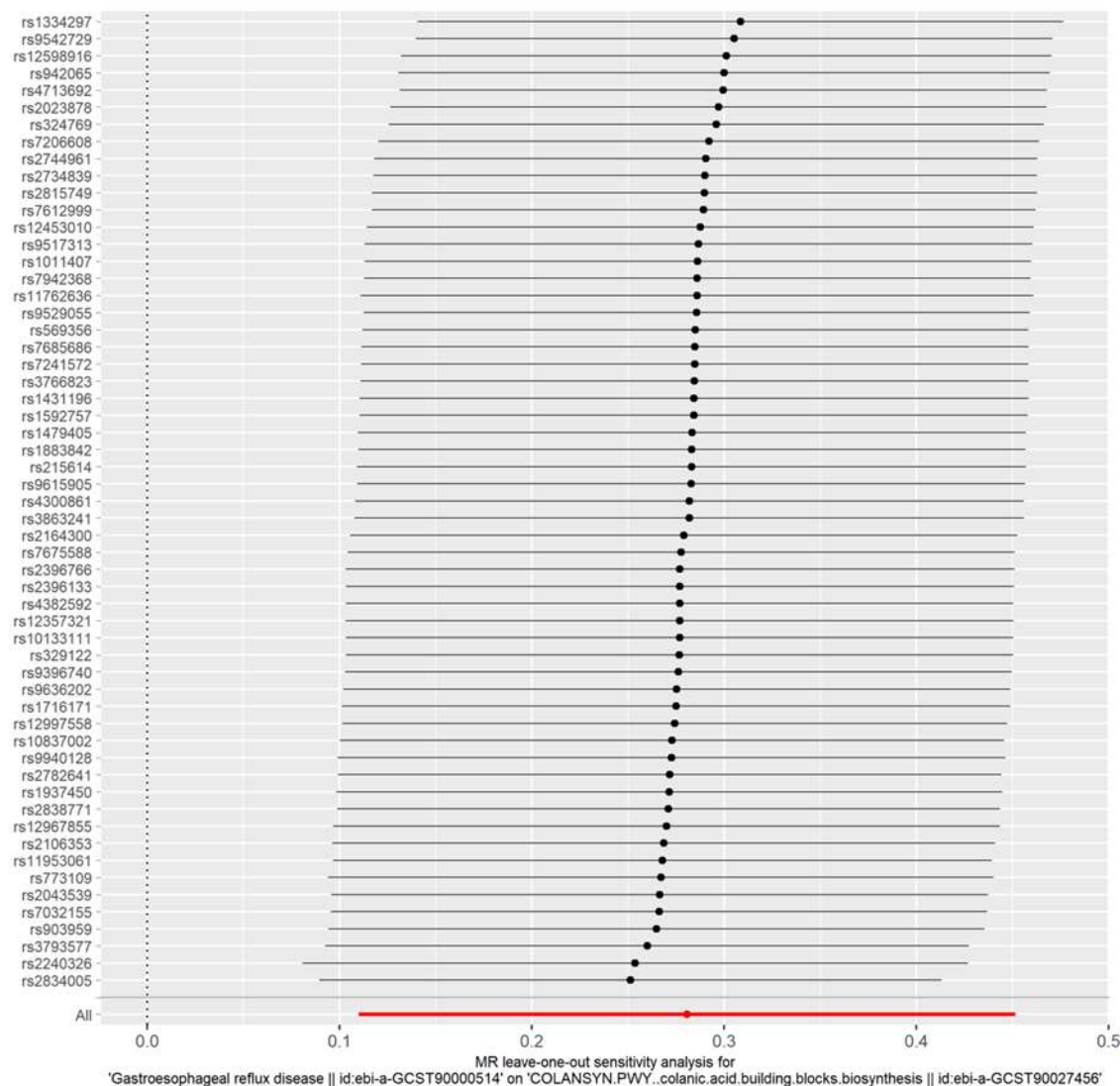
Supplementary Figure 9: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (PWY.7219..adenosine.ribonucleotides.de.novo.biosynthesis).



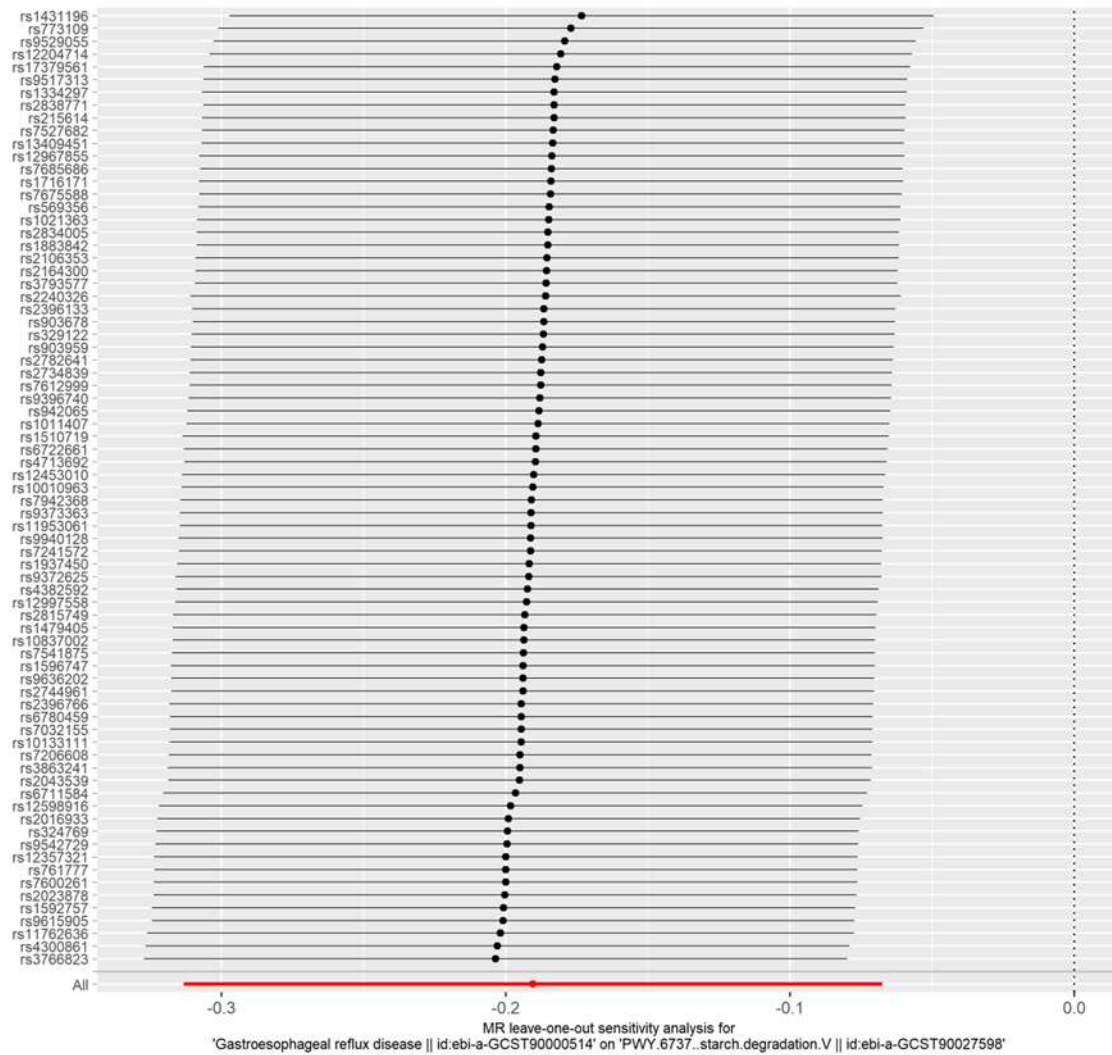
Supplementary Figure 10: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (PWY.2941..L.lysine.biosynthesis.II).



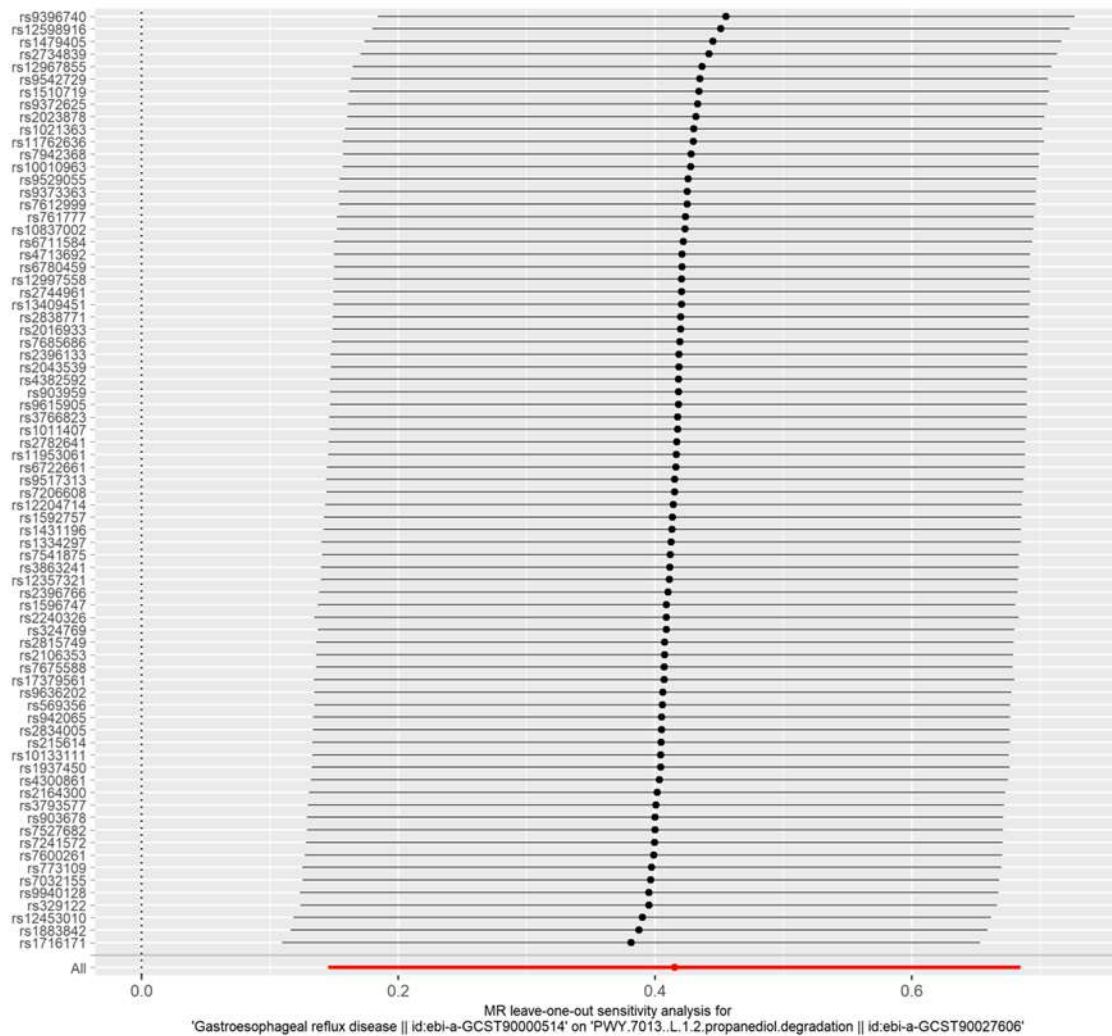
Supplementary Figure 11: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (PWWY.7187..pyrimidine.deoxyribonucleotides.de.novo.biosynthesis.II).



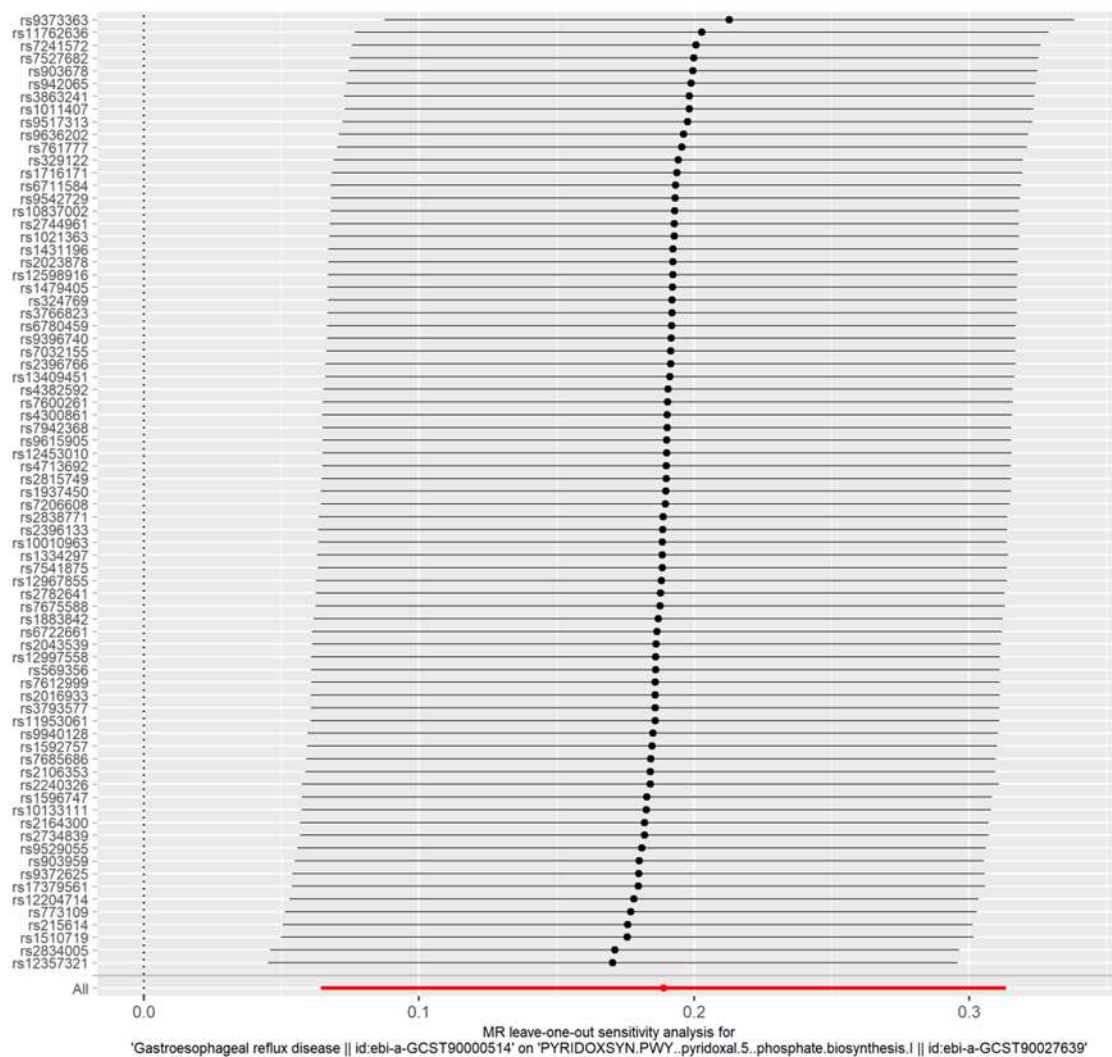
Supplementary Figure 12: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (COLANSYN.PWY..colanic.acid.building.blocks.biosynthesis).



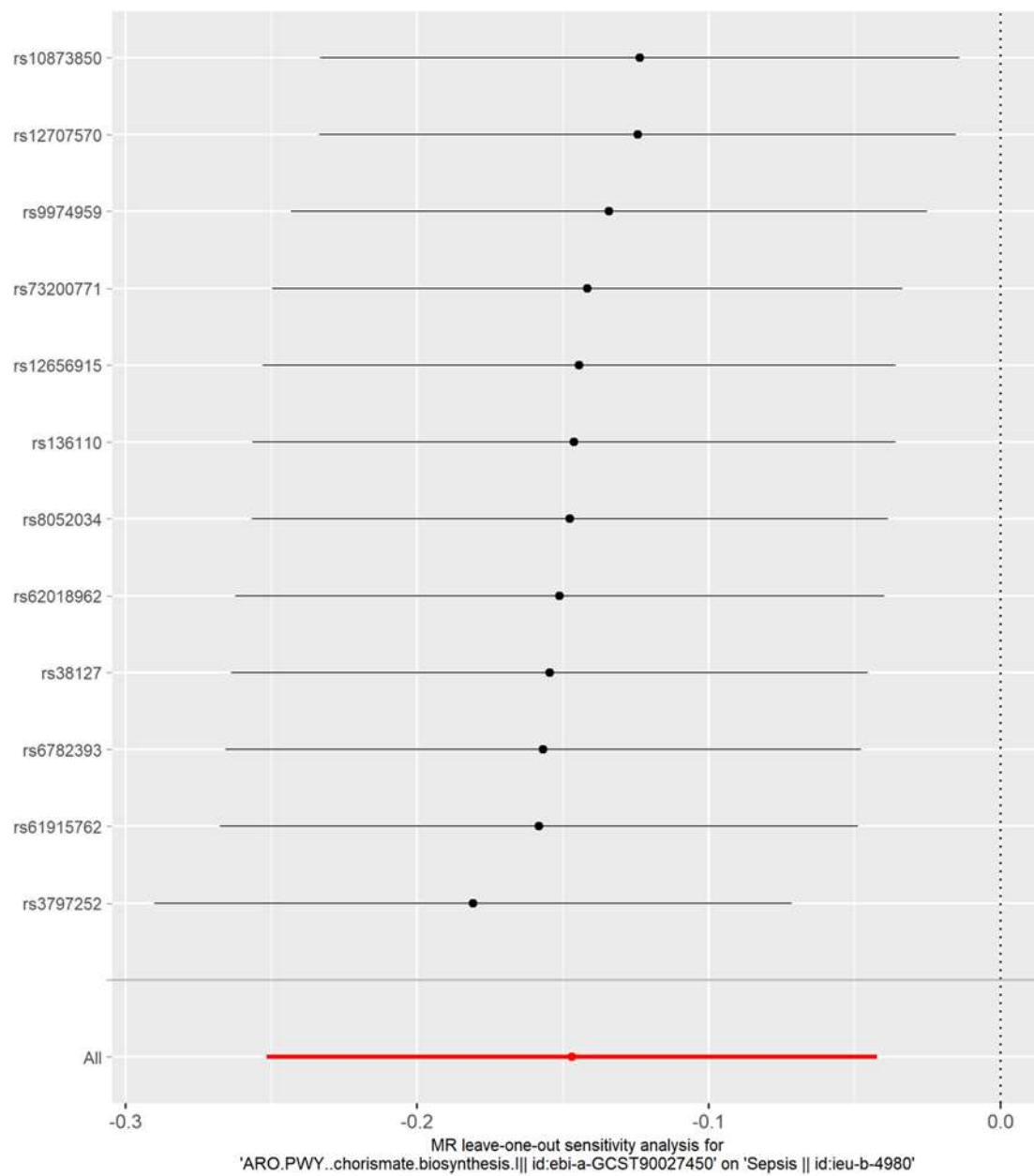
Supplementary Figure 13: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (PWY.6737..starch.degradation.V).



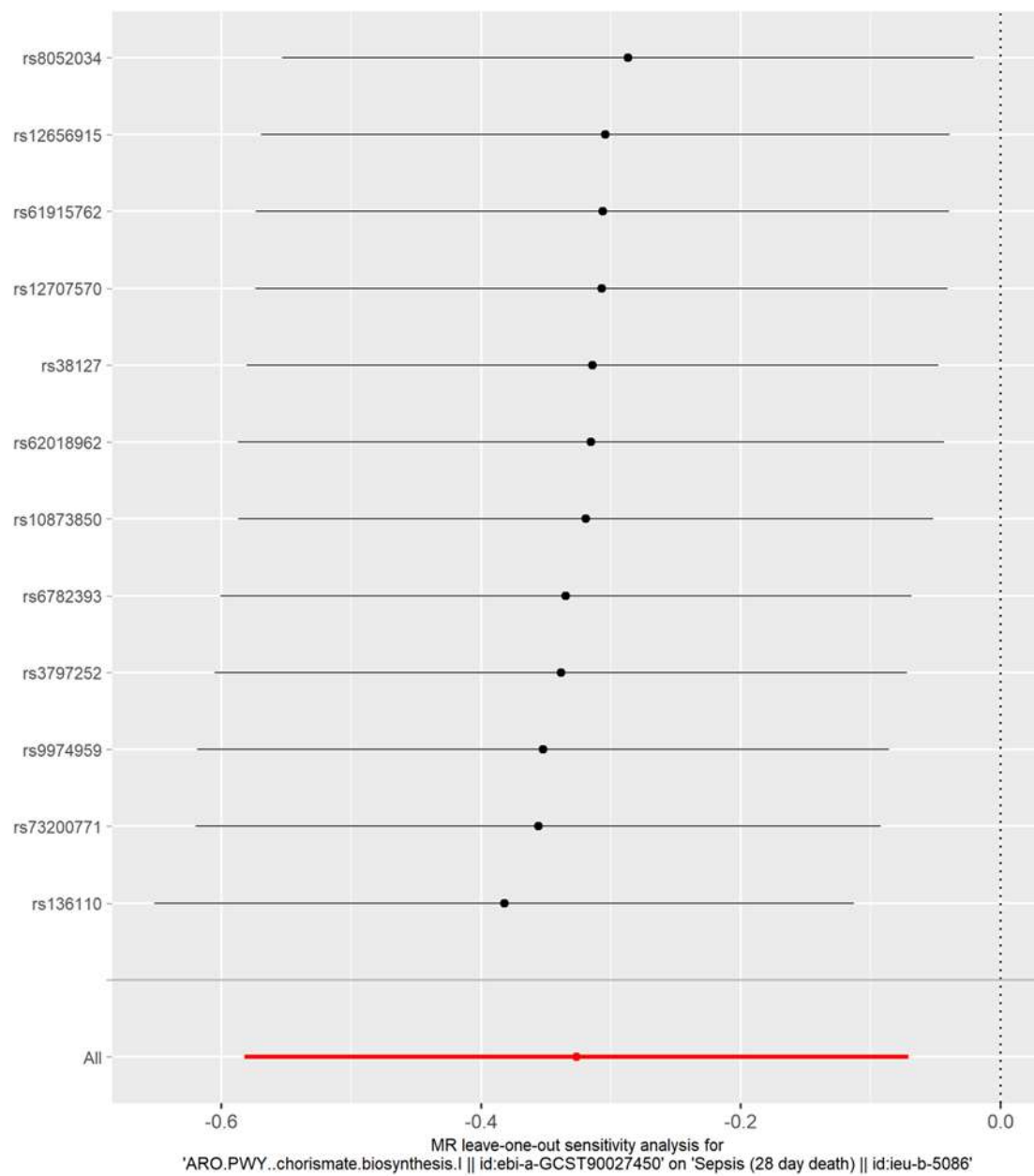
Supplementary Figure 14: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (PWY.7013..L.1.2.propanediol.degradation).



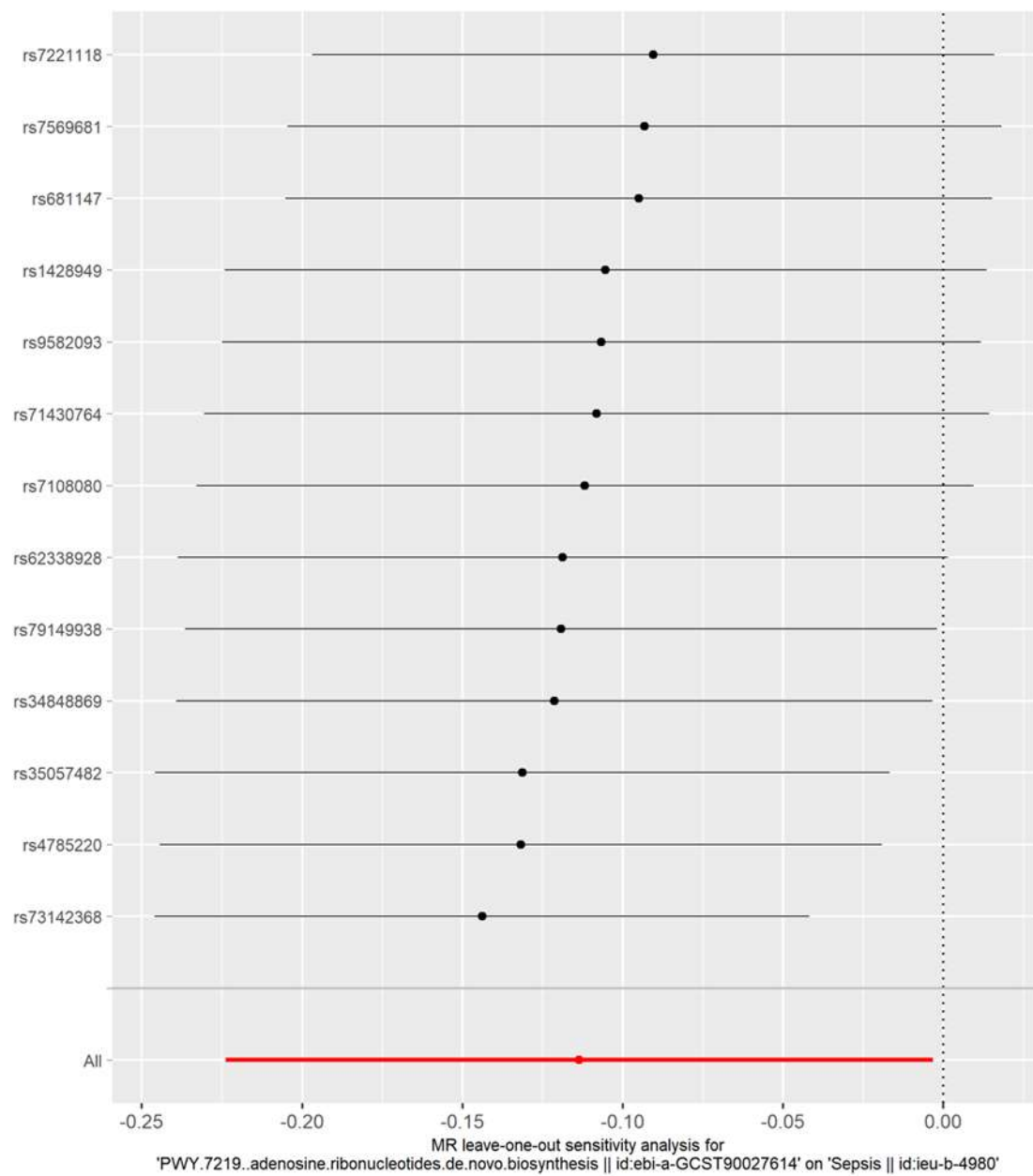
Supplementary Figure 15: Leave-one-out plot of SNPs related to GERD and gut bacterial pathway abundance (PYRIDOXSYN.PWY..pyridoxal.5..phosphate.biosynthesis.I).



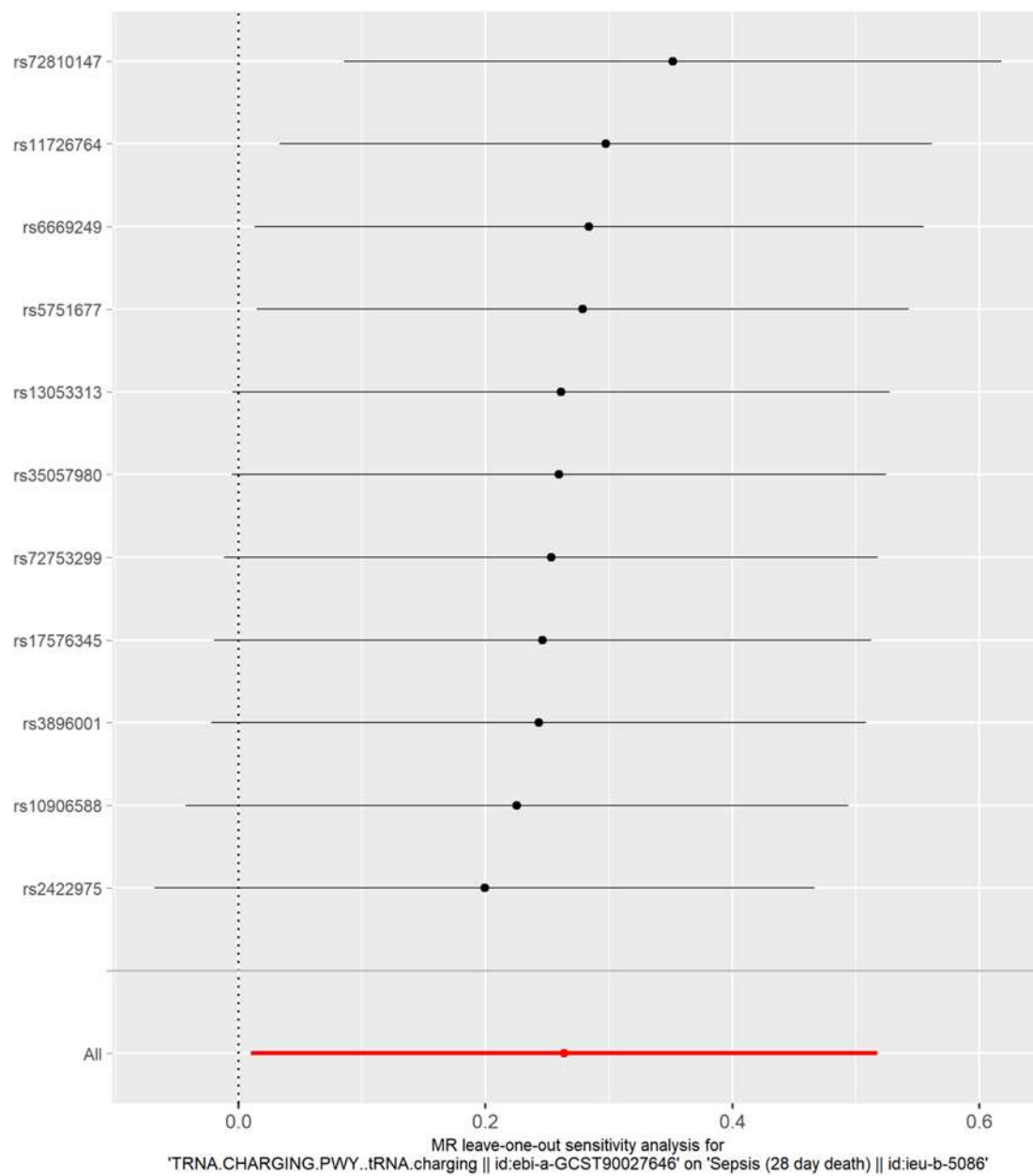
Supplementary Figure 16: Leave-one-out plot of SNPs related to gut bacterial pathway abundance (ARO.PWY..chorismate.biosynthesis.I) and sepsis.



Supplementary Figure 17: Leave-one-out plot of SNPs related to gut bacterial pathway abundance (ARO.PWY..chorismate.biosynthesis.I) and sepsis(28 day death).



Supplementary Figure 18: Leave-one-out plot of SNPs related to gut bacterial pathway abundance (PWY.7219..adenosine.ribonucleotides.de.novo.biosynthesis) and sepsis.



Supplementary Figure 19: Leave-one-out plot of SNPs related to gut bacterial pathway abundance (TRNA.CHARGING.PWY..tRNA.charging) and sepsis(28 day death).