

Figure S2 Visualization of sensitivity analysis for memory B cell %B cell on SP. (A) Leave-one-out method of memory B cell %B cell; (B) funnel plot of memory B cell %B cell; (C) scatter diagram of memory B cell %B cell; (D) forest map of memory B cell %B cell. MR, Mendelian randomization; SE, standard error; SNP, single nucleotide polymorphism; SP, spontaneous pneumothorax.

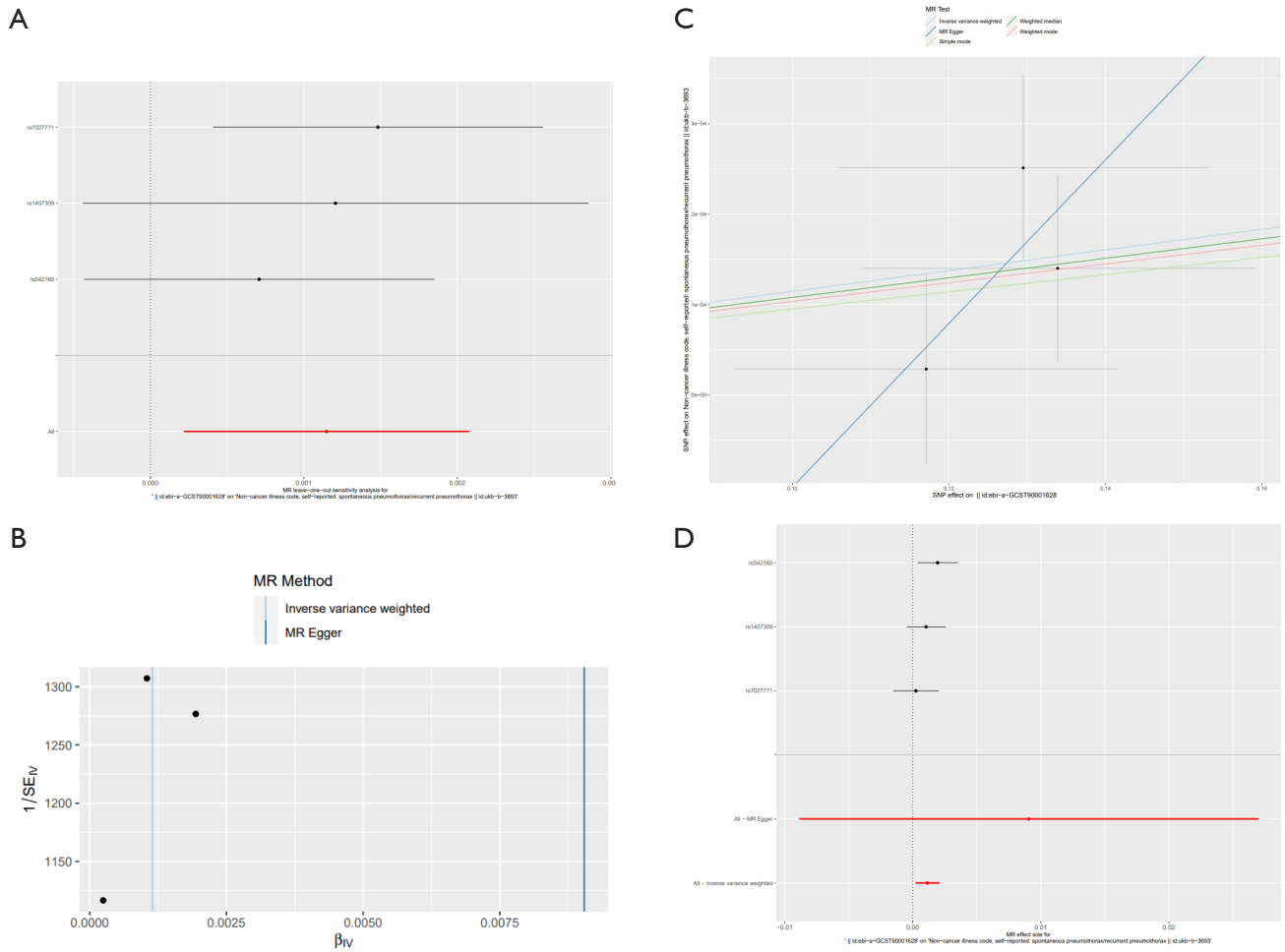


Figure S3 Visualization of sensitivity analysis for HLA-DR⁺CD8⁺ T cell %T cell on SP. (A) Leave-one-out method of HLA-DR⁺CD8⁺ T cell %T cell; (B) funnel plot of HLA-DR⁺CD8⁺ T cell %T cell; (C) scatter diagram of HLA-DR⁺CD8⁺ T cell %T cell; (D) forest map of HLA-DR⁺CD8⁺ T cell %T cell. HLA-DR, human leukocyte antigen-DR isotype; MR, Mendelian randomization; SE, standard error; SNP, single nucleotide polymorphism; SP, spontaneous pneumothorax.

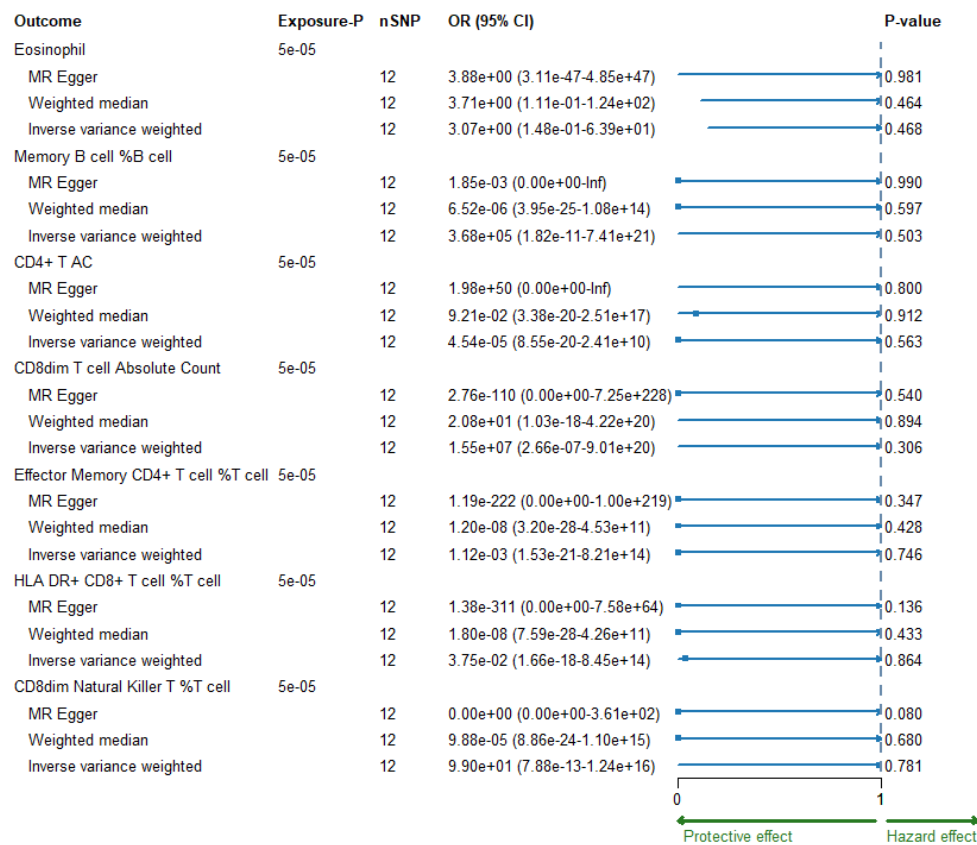


Figure S4 Estimating the reverse Mendelian causal effect of spontaneous pneumothorax on positive immune cells with a P-threshold of 5E-05. CI, confidence interval; CD, cluster of differentiation; Exposure-P, P value during instrumental variable extraction for exposure factors; HLA-DR, human leukocyte antigen-DR isotype; MR, Mendelian randomization; nSNP, number of single nucleotide polymorphisms; OR, odds ratio.

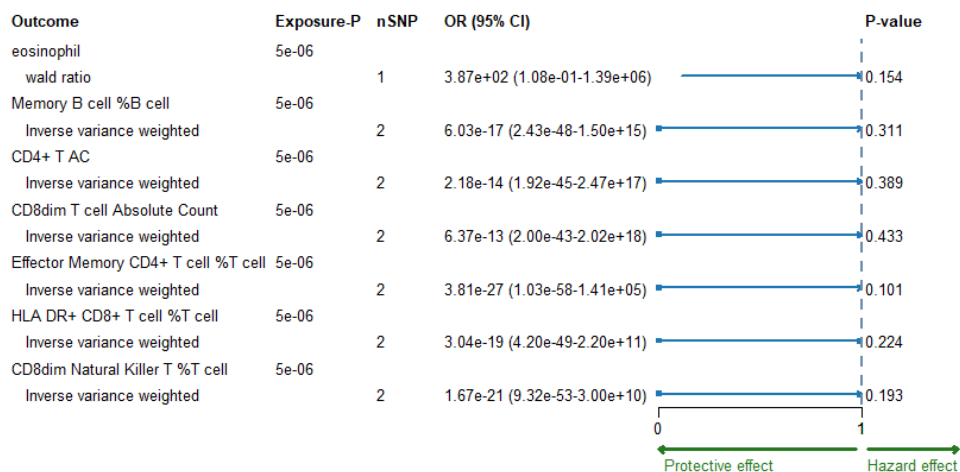


Figure S5 Estimating the reverse Mendelian causal effect of spontaneous pneumothorax on positive immune cells with a P-threshold of 5E-06. CI, confidence interval; CD, cluster of differentiation; Exposure-P, P value during instrumental variable extraction for exposure factors; HLA-DR, human leukocyte antigen-DR isotype; nSNP, number of single nucleotide polymorphisms; OR, odds ratio.