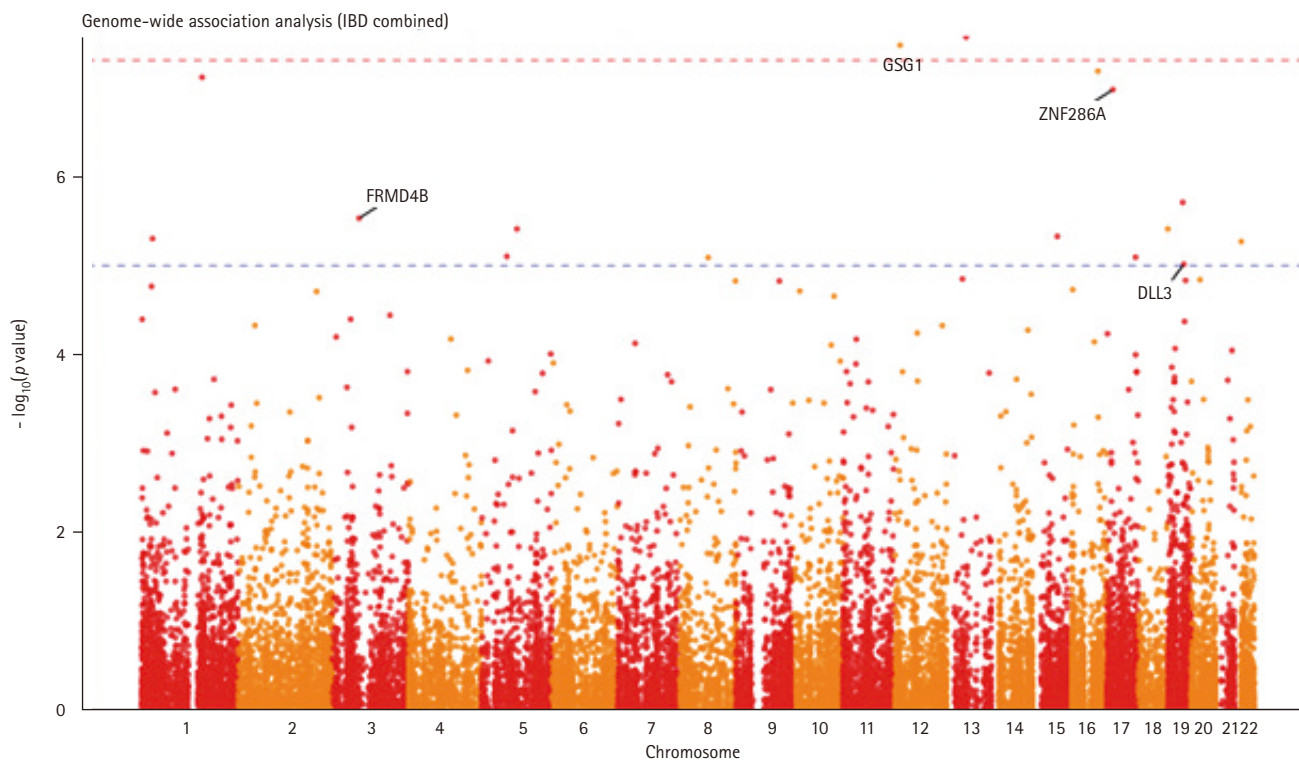




Supplementary Figure 5. Variant-wise associations with age of onset in combined IBD. Manhattan plot for the combined IBD cohort. Red and blue dashed lines indicate genome-wide ($p < 5 \times 10^{-8}$) and suggestive ($p < 1 \times 10^{-5}$) significance thresholds, respectively. One variant in GSG1 achieved genome-wide significance, and three variants (ZNF286A, DLL3, FRMD4B) reached the suggestive threshold. Annotated genes represent variants meeting both variant-level ($p < 1 \times 10^{-5}$) and gene-level (FDR < 0.05) significance. IBD, Inflammatory bowel disease; FDR, false discovery rate.