

Supplementary Material on heterogeneity of effects in CD

Each plot represents homogeneity/heterogeneity of effect for one reported HLA alleles (from the selected model) or index SNP. Effect sizes ($\log(\text{OR})$) with 95% confidence intervals are shown for each of the 9 population clusters (**Online Methods** and **Supplementary Fig. 14**). The blue diamond illustrates the pooled effect and confidence interval, under a fixed-effect model. The p-value for heterogeneity and meta-analysis (pooled effect) is shown below the plot. To be noted, the p-value for the meta-analysis may be slightly different from the main analysis.

