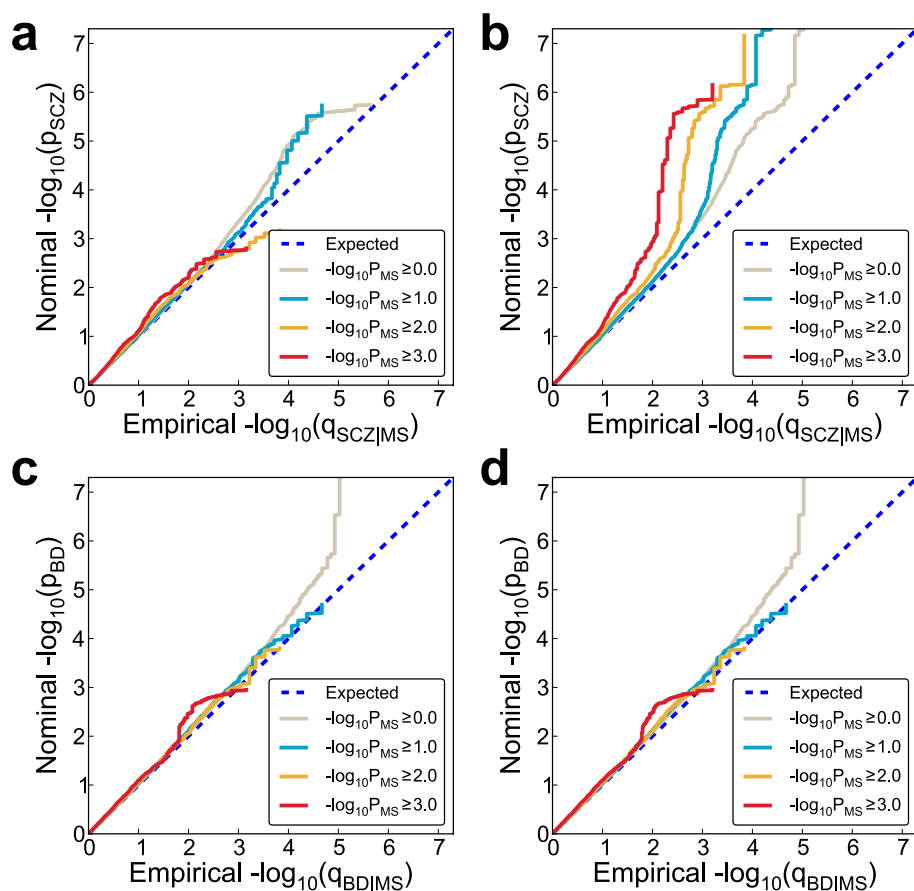


Supplementary Figure 6



Conditional Q-Q plot of nominal versus empirical $-\log_{10}$ p-values (corrected for inflation) in Schizophrenia (SCZ) and Bipolar disorder (BD) below the standard GWAS threshold of $p < 5 \times 10^{-8}$ as a function of significance of association with multiple sclerosis (MS) at the level of $-\log_{10}(p) \geq 0$, $-\log_{10}(p) \geq 1$, $-\log_{10}(p) \geq 2$, $-\log_{10}(p) \geq 3$ corresponding to $p \leq 1$, $p \leq 0.1$, $p \leq 0.01$, $p \leq 0.001$, respectively, after removing **a.**) SCZ SNPs located within the MHC region and other SNPs in LD ($r^2 > 0.2$) with such SNPs, **b.**) SCZ SNPs located within MHC region genes whose alleles are studied in the current study and other SNPs in LD ($r^2 > 0.2$) with such SNPs, **c.**) BD SNPs located within the MHC region and other SNPs in LD ($r^2 > 0.2$) with such SNPs, **d.**) BD SNPs located within MHC region genes whose alleles are studied in the current study and other SNPs in LD ($r^2 > 0.2$) with such SNPs. Dotted lines indicate the null-hypothesis.