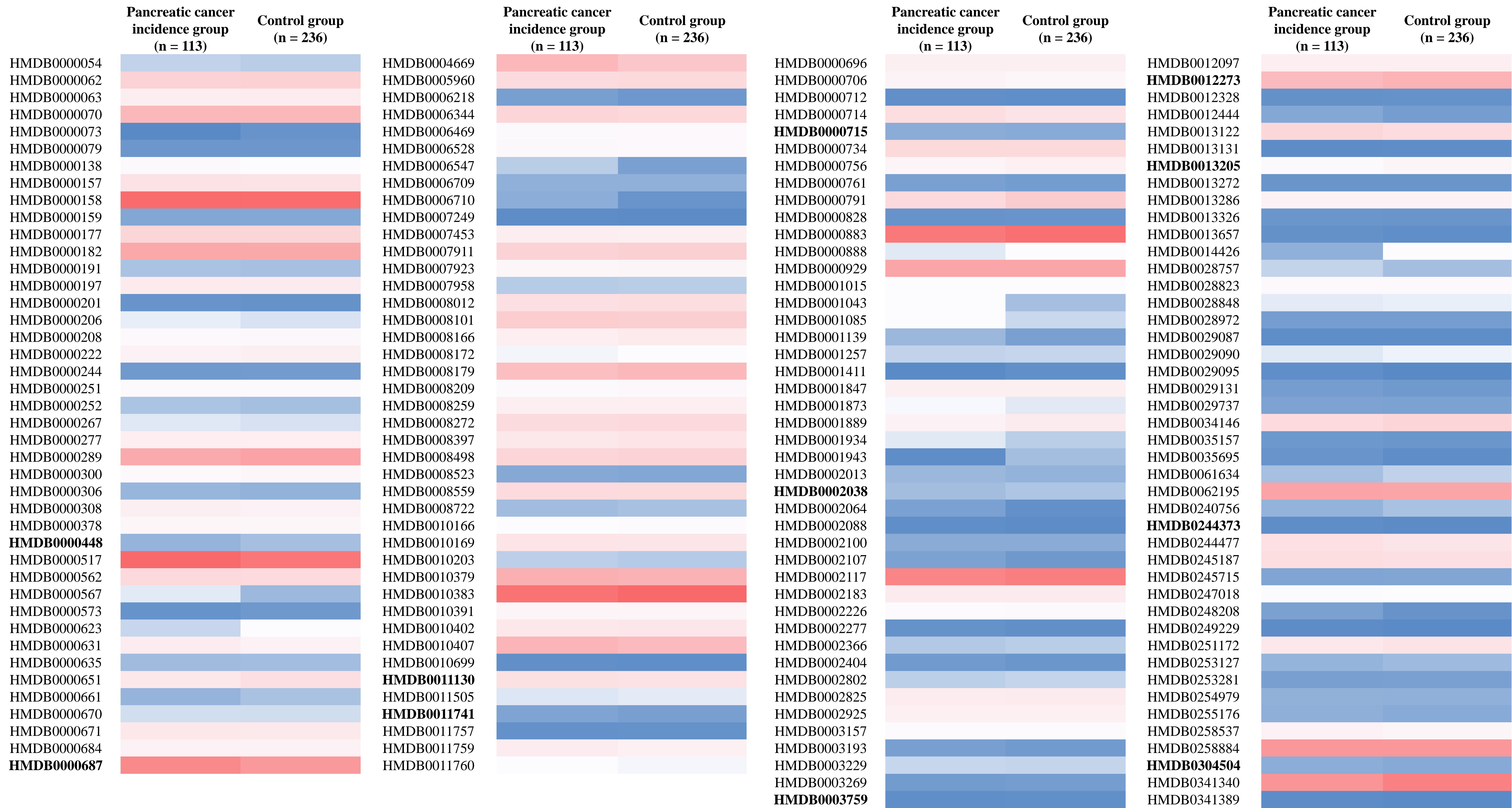


Supplementary figure 1. Heatmap of metabolite abundance in each group

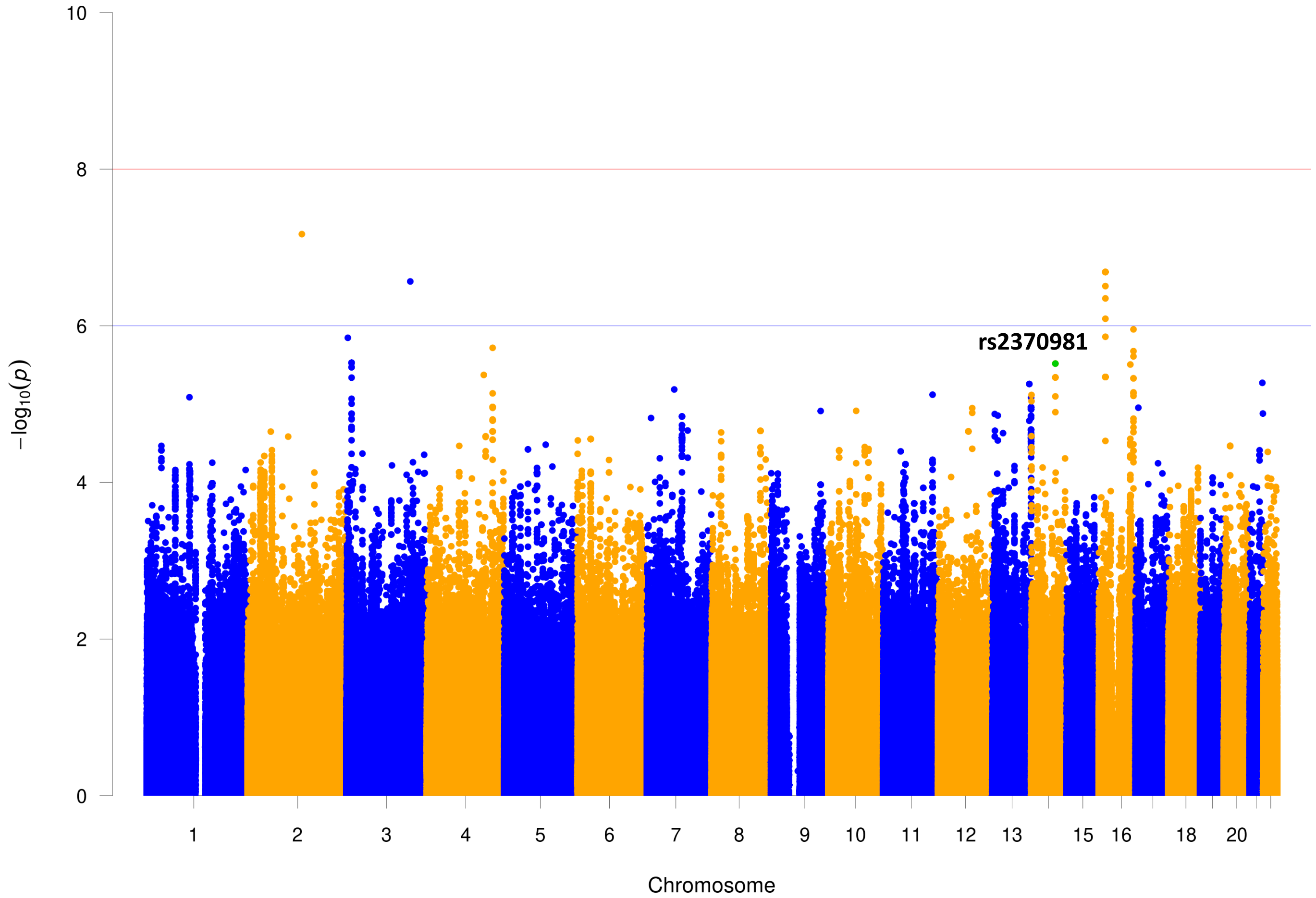


*Significant Metabolites in OPLS-DA (VIP>1.0) are written in **bold**.

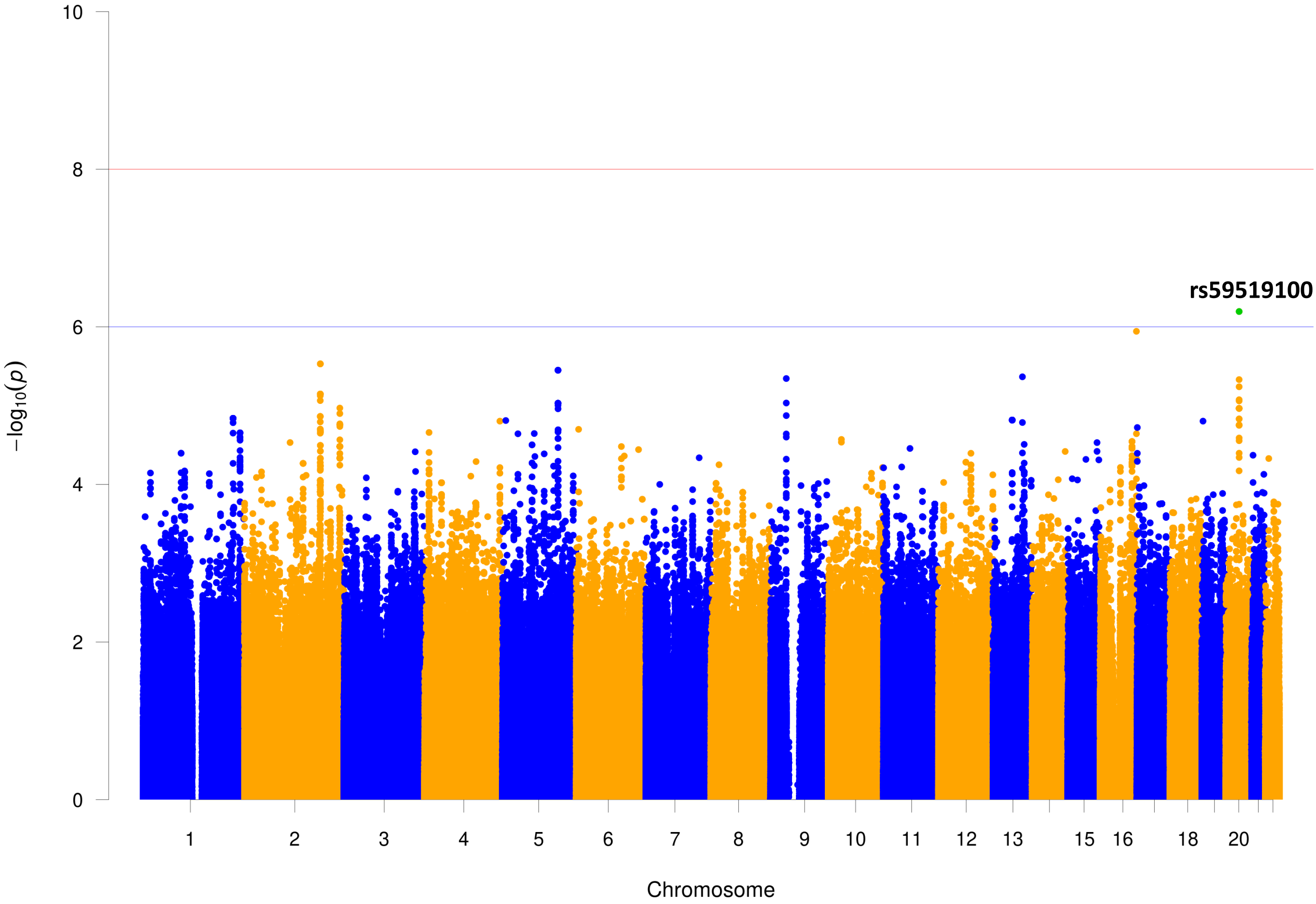


Supplementary figure 2. Manhattan plot from GWAS

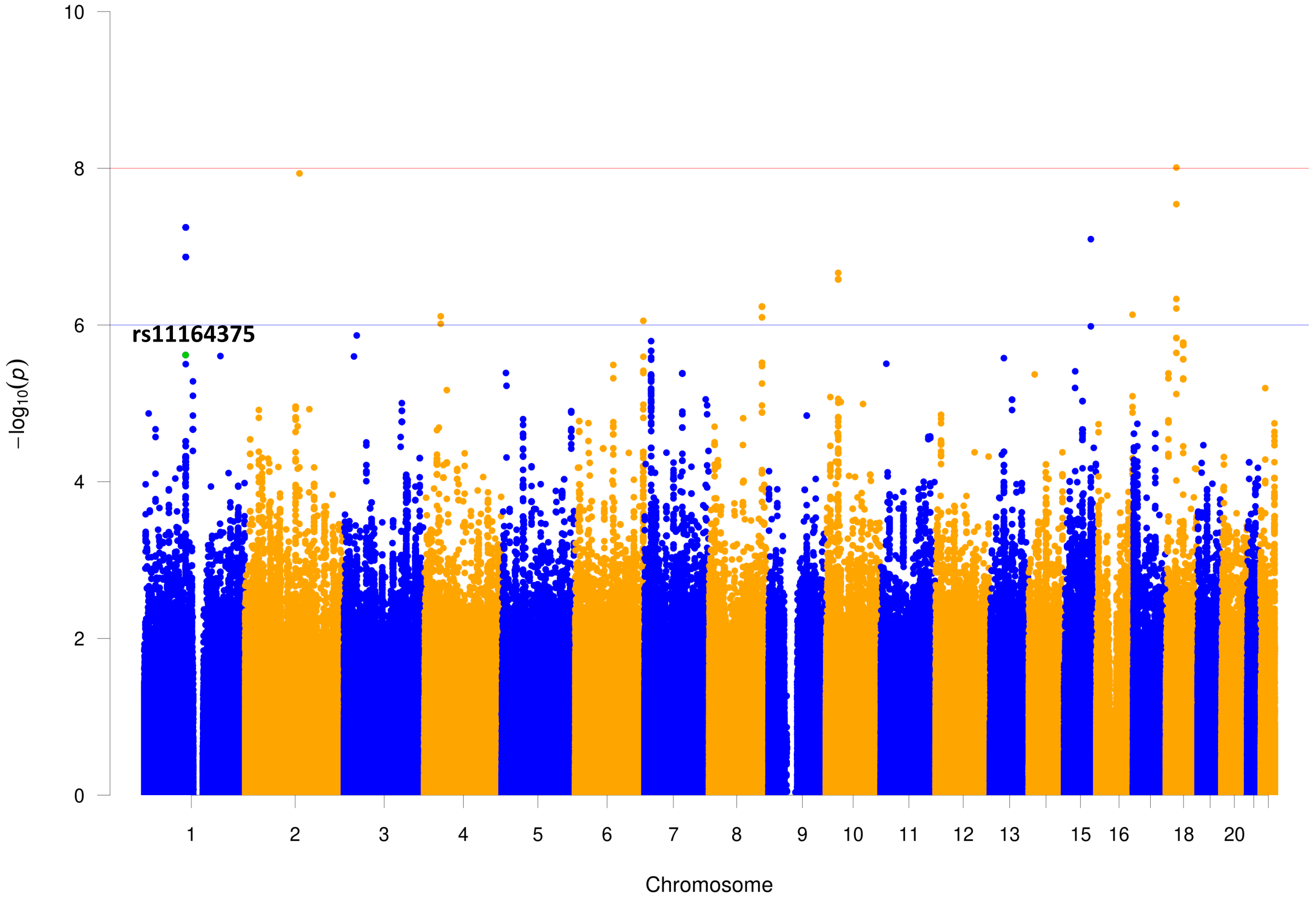
HMDB0244373



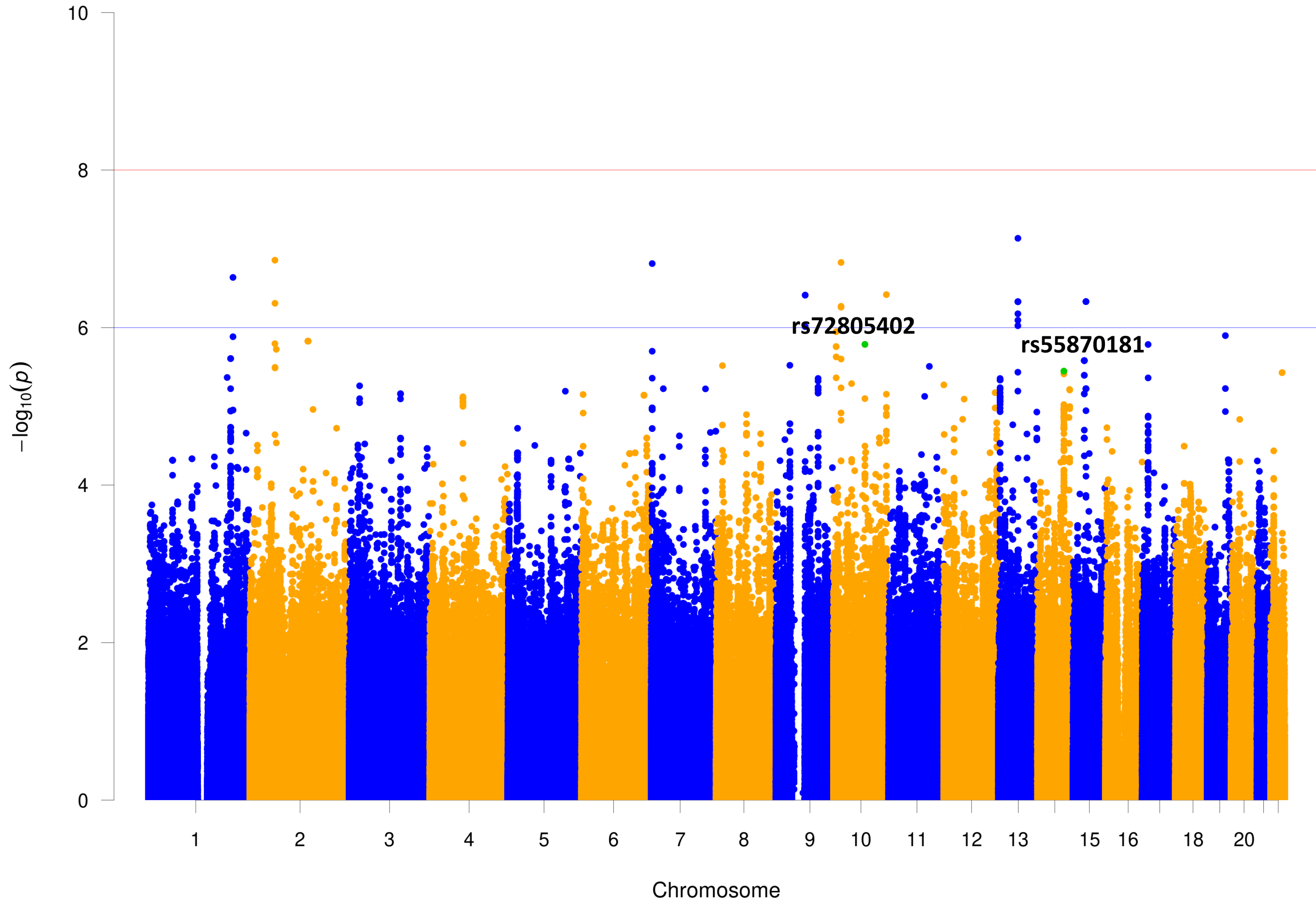
HMDB0011741



HMDB0011130



HMDB0000687



Supplementary figure 3. Moderation effect of smoking on association between metabolites and pancreatic cancer risk

