

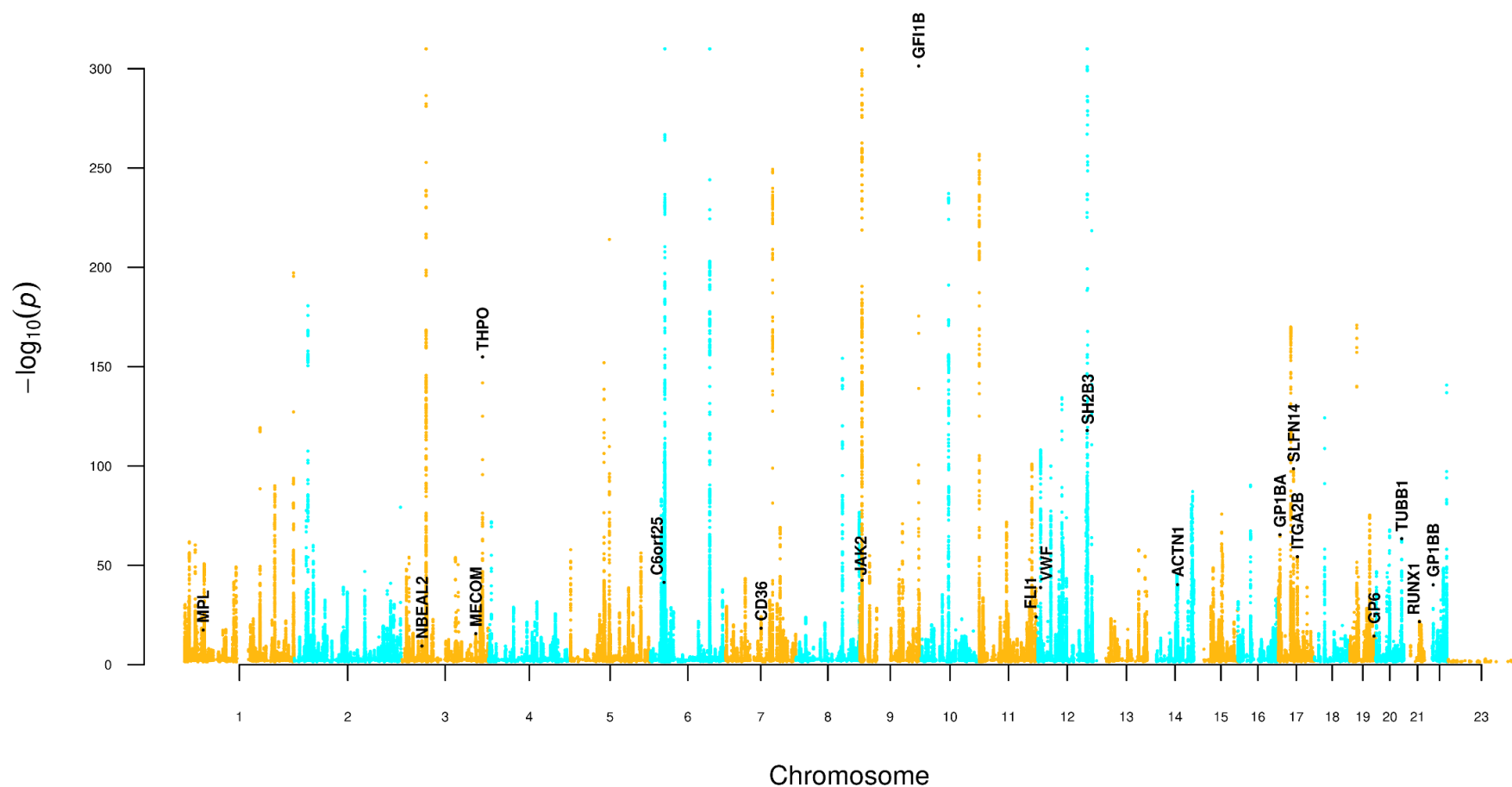
## **Genetic variants associated with platelet count are predictive of human disease and physiological markers**

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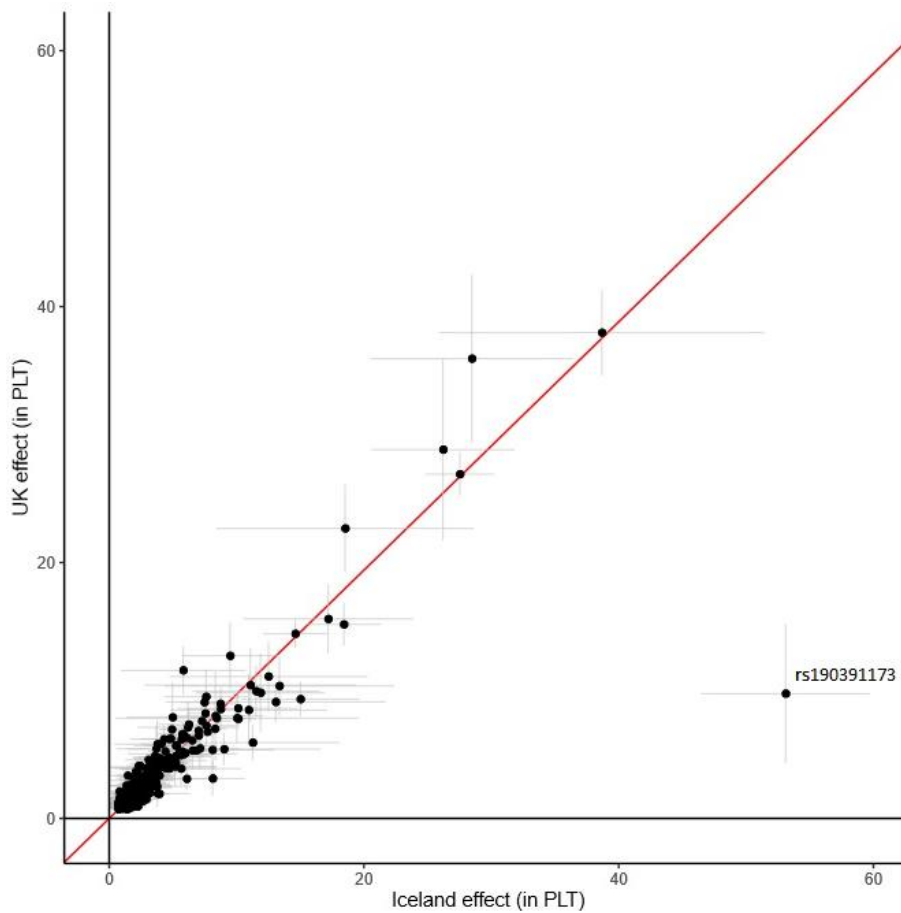
### **Additional Information**

Following Supplementary Material is available for this paper.

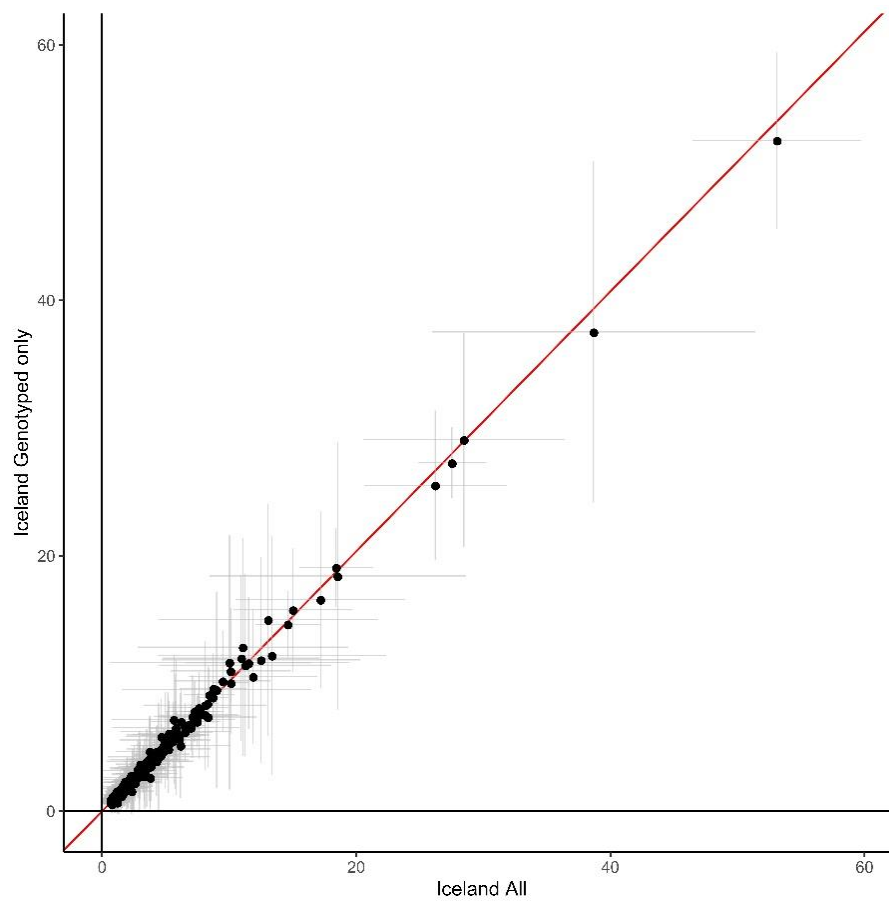
- Supplementary Figures 1-4 (available in this file)
- Supplementary Data 1-25 (available as separate MS Excel files)



**Supplementary Figure 1. Manhattan plot.** The plot shows all variants in the meta-analysis that associate with PLT with  $p$ -value  $\leq 0.05$ , are present in both populations, have  $\text{info} > 0.8$  in Iceland and  $> 0.7$  in the UK and no quality issues. Presented are negative  $\log_{10}$ -transformed  $p$ -values from an inverse variance weighted meta-analysis of association results from Iceland and UKB,  $n=536,974$  (y-axis) over the 23 chromosomes (x-axis). Names of genes, which are implicated in platelet-related disorders and harbor genome-wide significant variants, are marked with black. For details on associations, see **the GWAS Summary Statistics**.

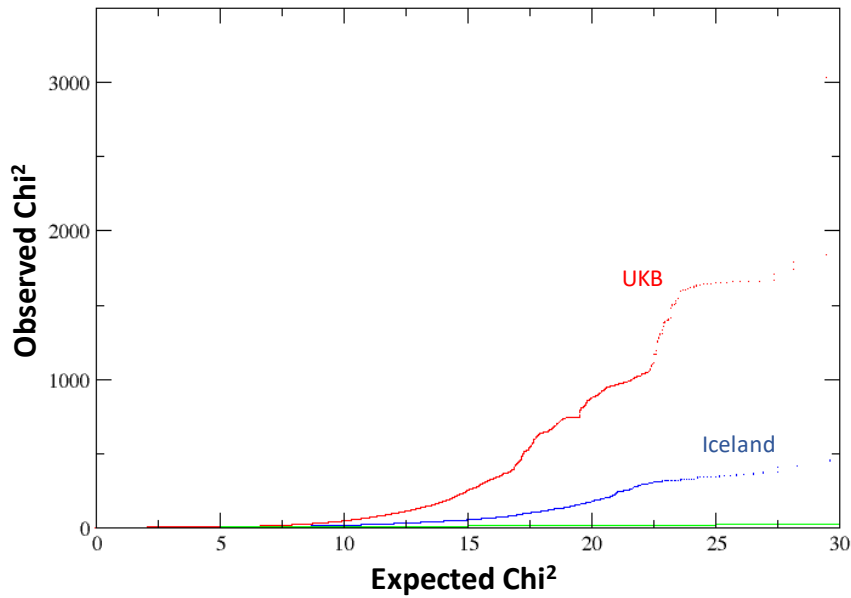


**Supplementary Figure 2. Effects of the 577 PLT variants in Iceland vs. the UK.** Shown are effects of the 577 PLT variants expressed as platelet count (PLT, in  $N \times 10^3/\mu l$ ) with 95% confidence intervals, in Iceland vs the UK. The outlier, rs190391173, is a very rare variant in the UK (minor allele frequency (MAF) = 0.07%) with imputation information 0.88, whereas it is slightly more frequent (MAF=0.26%) and much better imputed in Iceland (imputation information =1), which may explain the observed effect difference. For detailed information on associations, see **Supplementary Data 2**.

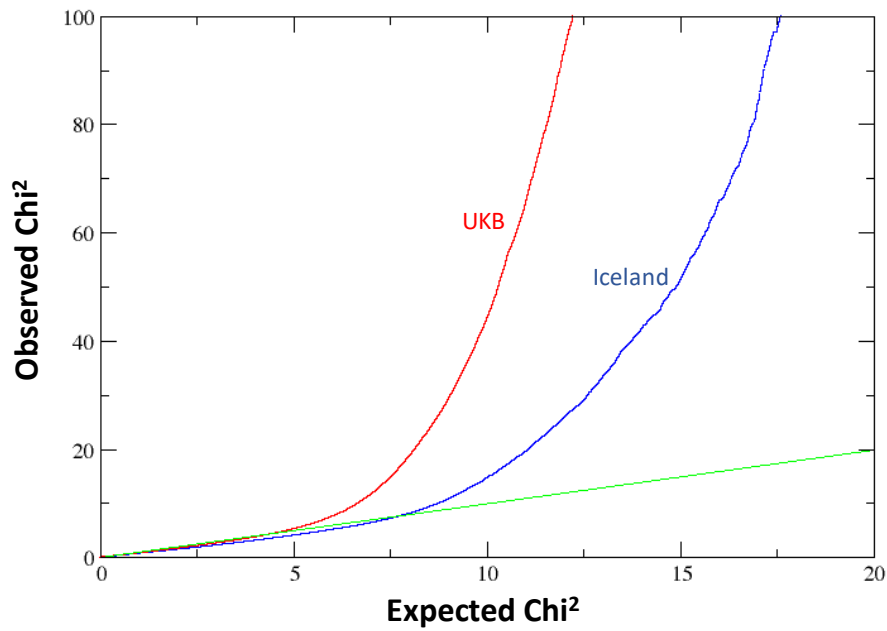


**Supplementary Figure 3. Comparison of data including both genotyped and familially imputed Icelanders vs. only genotyped Icelanders.** The plot shows effects of the 577 PLT variants expressed as platelet count (PLT, in  $N \times 10^3/\mu l$ ) with 95% confidence intervals, in data including both genotyped and familially imputed Icelanders (x-axis) vs. only genotyped Icelanders (y-axis). For detailed information, see **Supplementary Data 23.**

**a**



**b**



**Supplementary Figure 4. Q-Q plots** of the adjusted  $\text{Chi}^2$ -statistics from a linear regression of PLT values on allele counts for all tested variants. (a) A Q-Q plot of the adjusted  $\text{Chi}^2$ -statistics for association with PLT values for all tested variants for the UK Biobank ( $n=397,495$ , red dots) and the Icelandic ( $n=139,479$ , blue dots) datasets, respectively. The equiangular line (green line) is included in the plot for reference purpose. (b) A subset of (a) showing the Q-Q plot for variants with low  $\text{Chi}^2$  values.