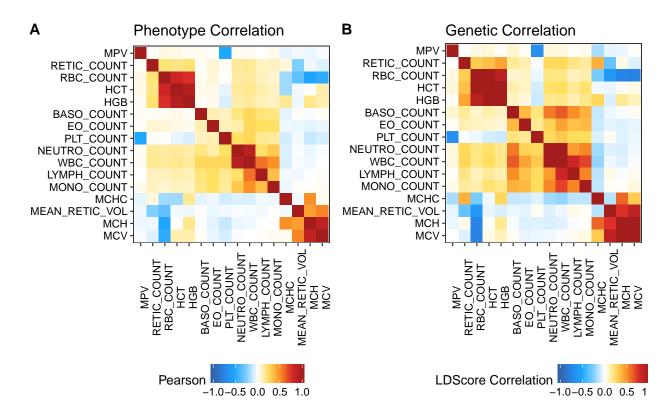
${\tt concordance=TRUE}$ 

# Interrogation of human hematopoietic traits at single-cell and single-variant resolution

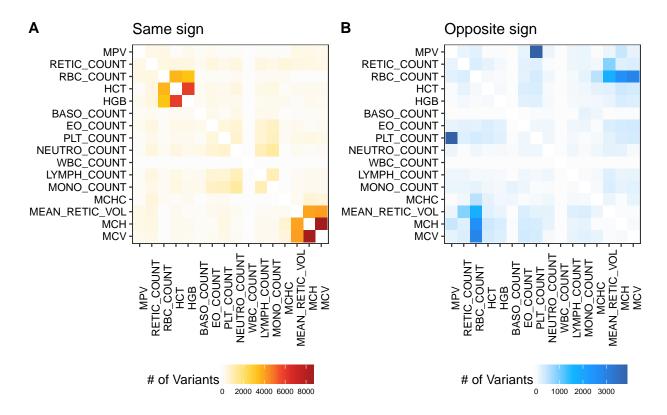
(Caleb, Erik, Jacob), Will?, Hilary, Joel, (Martin, Jason, Vijay)

Supplemental Information

## Overview of UK Biobank data

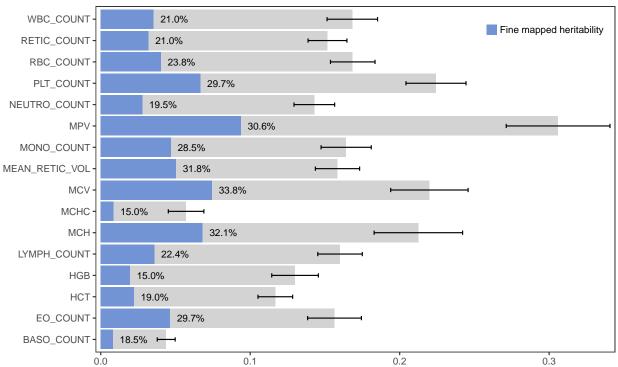


Supplemental Figure 1: Phenotypic and genetic correlations across the 16 traits examined.

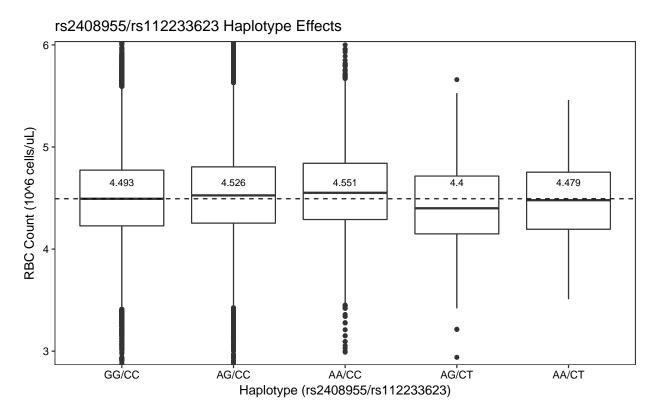


Supplemental Figure 2: Numbers of pleiotropic variants

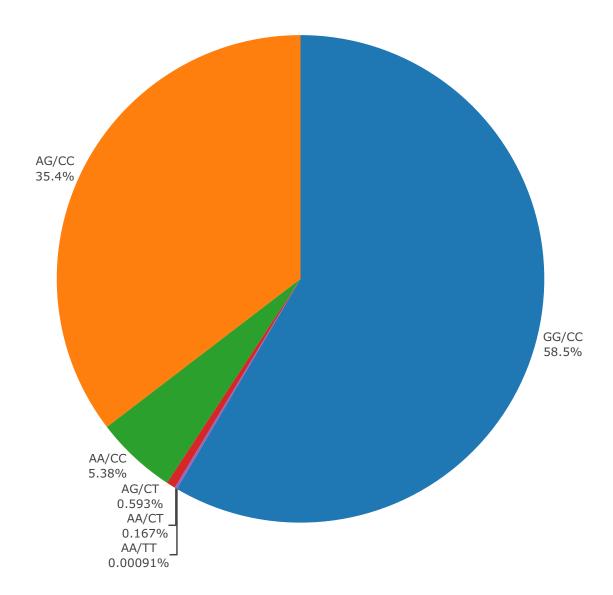
## Finemapped Trait Heritabilities



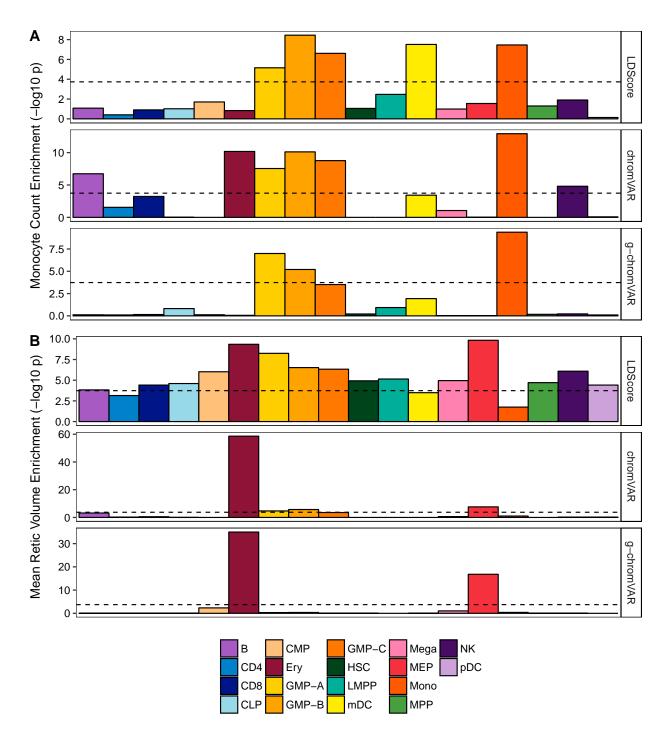
Supplemental Figure 3: Heritability estimates from LD Score Regression across 16 hematopoetic traits. The estimates of the narrow-sense SNP heritabilities are plotted in gray with their corresponding standard erors. Heritability estimates for all variants with fine mapped posterior probability  $\dot{z}$  0.001 are plotted in blue for each trait, and the proportions of total narrow-sense heritability captured by these fine mapped variants (blue bar / gray bar) are indicated by the numbered labels.



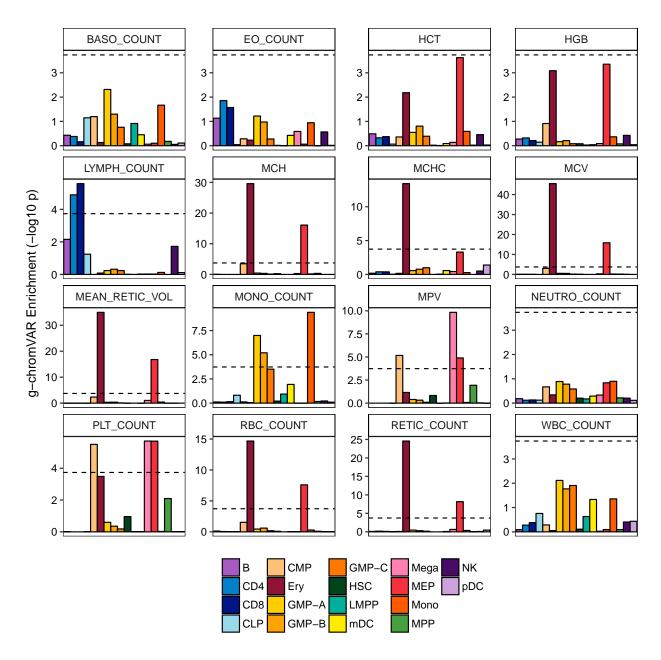
Supplemental Figure 4: Moderating effects of CCND3 haplotypes on red blood cell counts.



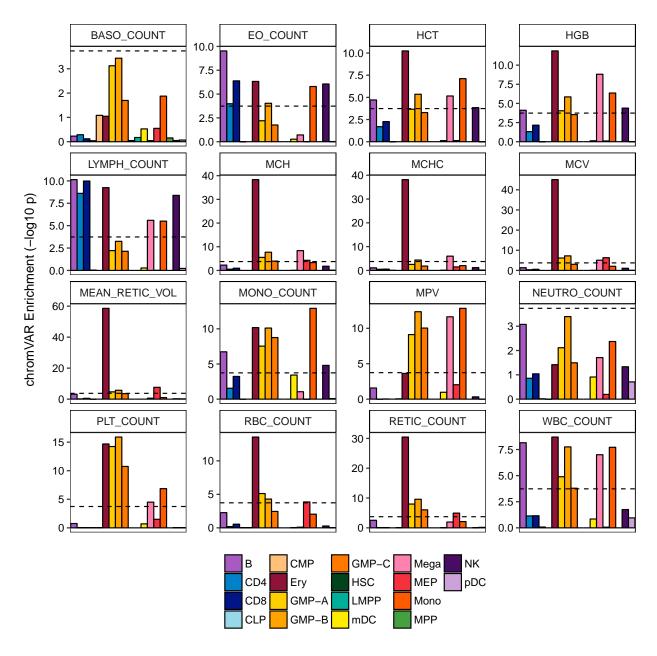
Supplemental Figure 5: Haplotypes frequencies of the CCND3 variants rs2408955 and rs112233623 in the UKBB Population. Haplotype labels are formatted as rs2408955/rs112233623.



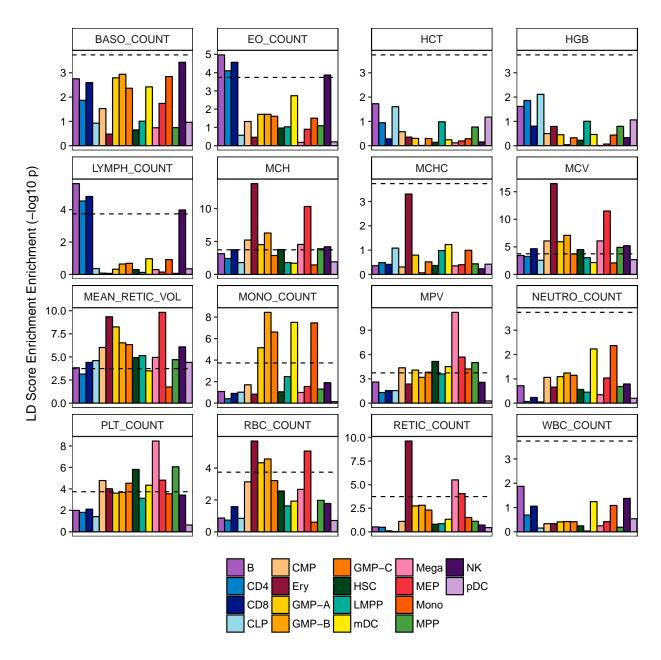
Supplemental Figure 6: Hematopoetic cell type enrichments for Mean Retic Volume and Monocyte count using various methods.



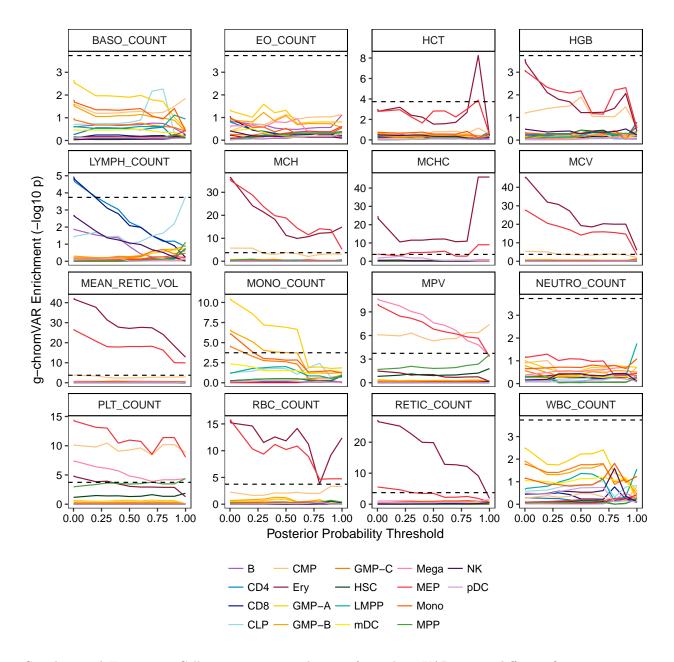
Supplemental Figure 7: All enrichments from g-chromVAR. The horizontal line shows a Bonferonni multiple testing adjusted threshold for statistical significance of enrichment.



Supplemental Figure 8: All enrichments from chromVAR. The horizontal line shows a Bonferonni multiple testing adjusted threshold for statistical significance of enrichment.



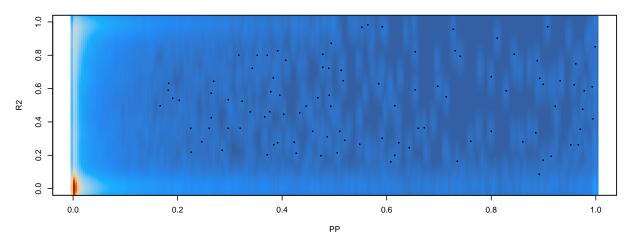
Supplemental Figure 9: All enrichments from LD Score. The horizontal line shows a Bonferonni multiple testing adjusted threshold for statistical significance of enrichment.



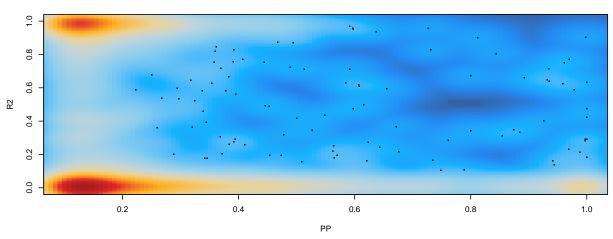
Supplemental Figure 10: Cell type - trait enrichments for g-chromVAR across different finemap variants posterior probability cutoffs. The horizontal line shows a Bonferonni multiple testing adjusted threshold for statistical significance of enrichment.

(A)

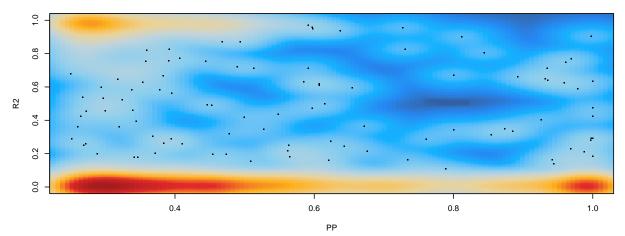
### PP0.001 LD to Sentinel Variant



#### **PP0.1 LD to Sentinel Variant**



PP0.25 LD to Sentinel Variant



Supplemental Figure 11: Sample embedding of figure in document.

(B)