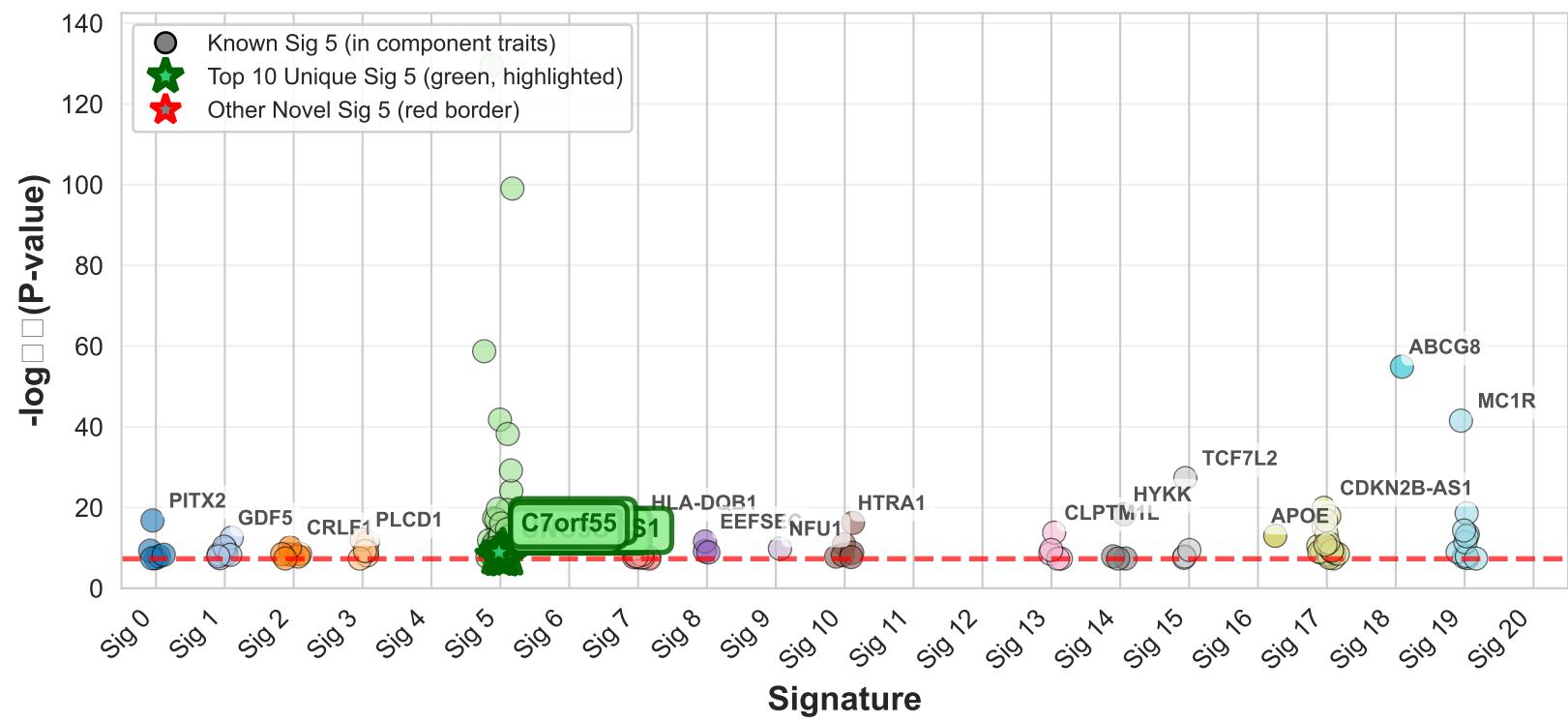
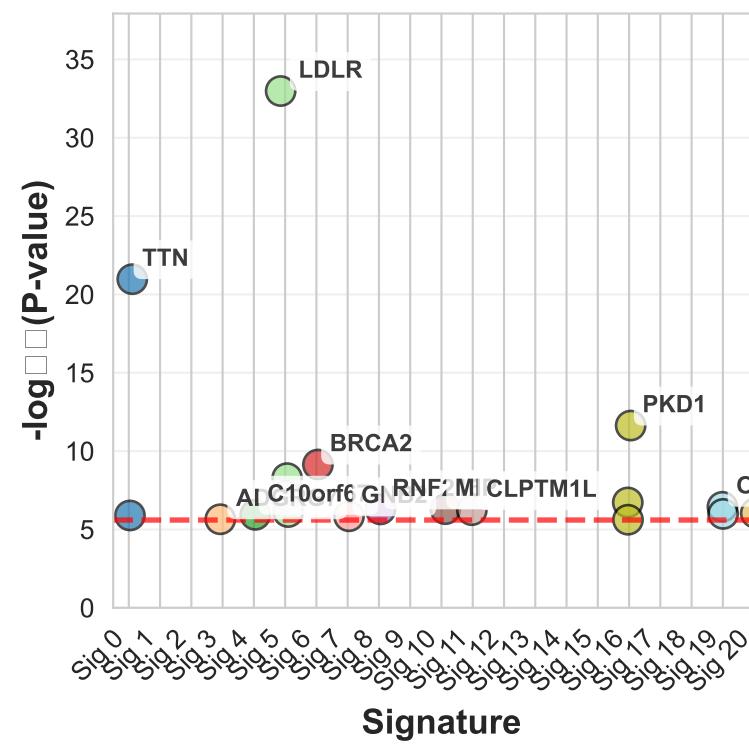


### A. Lead Variants by Signature (GWAS)

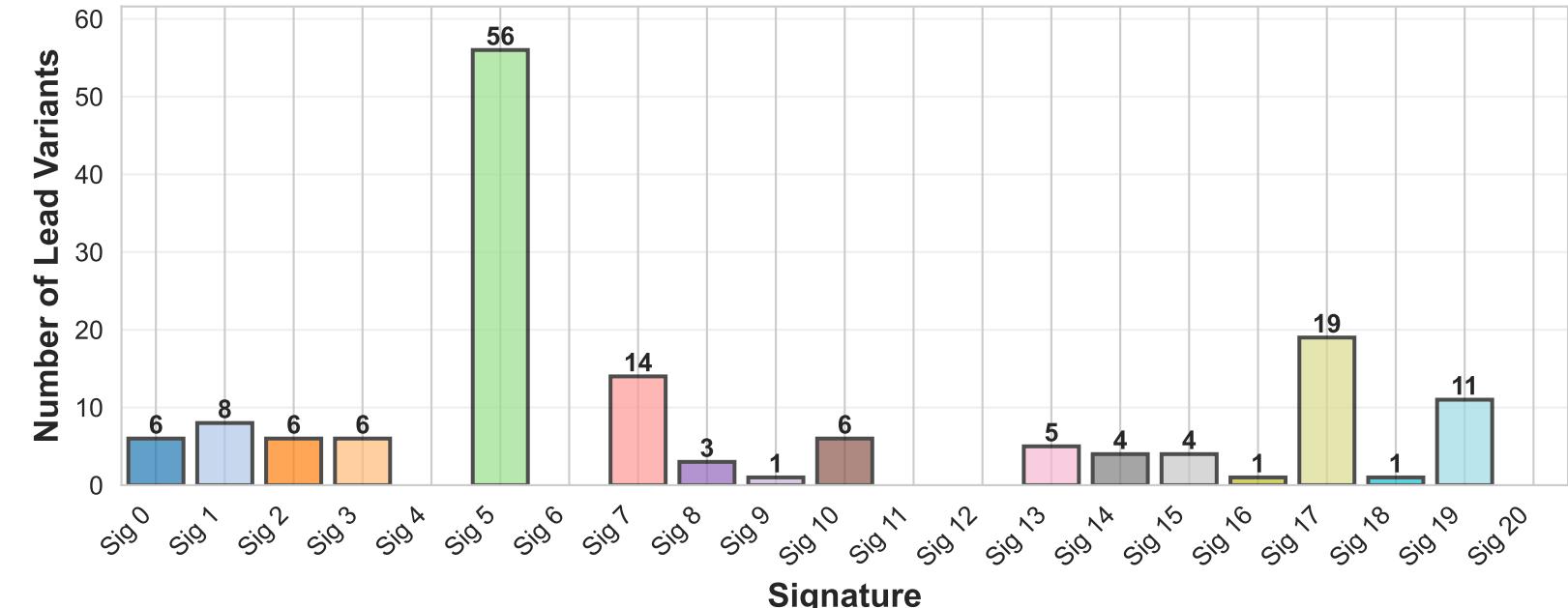
□ = Novel Sig 5 loci; Green □ = Top 10 Unique Sig 5 discoveries



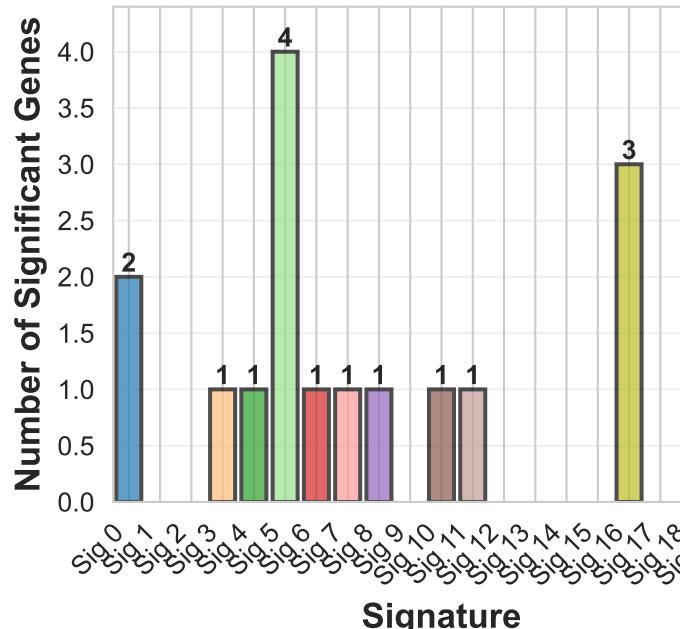
### B. Significant Genes by Signature (mask3: LoF Variants)



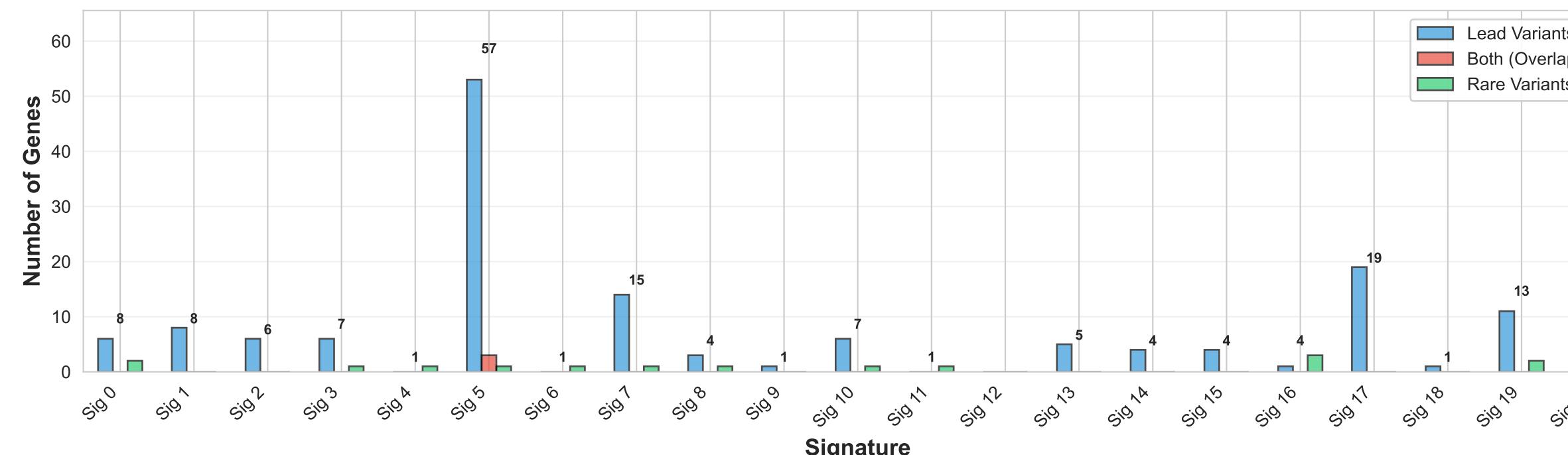
### C. Number of Lead Variants per Signature



### D. Number of Significant Genes per Signature (mask3)



### E. Gene Overlap: Lead Variants vs Rare Variants (mask3) by Signature



Top 10 Unique Sig 5 Loci  
(Not in component trait GWAS)

- FNDC3B (rs1499813)  
Fibronectin domain, insulin signaling
- HYOU1 (rs2509121)  
Hypoxia up-regulated protein, ER stress response
- C7orf55 (rs4732365)  
Unknown function
- OPRL1 (rs8121509)  
Opioid receptor, pain/stress signaling
- IL6R (rs6687726)  
Interleukin-6 receptor, inflammatory pathway
- PLCG2 (rs35039495)  
Phospholipase C gamma 2, platelet activation
- NR2F2-AS1 (rs7168222)  
Nuclear receptor antisense RNA
- R3HDM2 (rs4760278)  
RNA binding protein
- UNC5C (4:96088139\_ATATG\_A)  
Netrin receptor, axon guidance
- ALDH1A2 (rs1532085)  
Unknown function