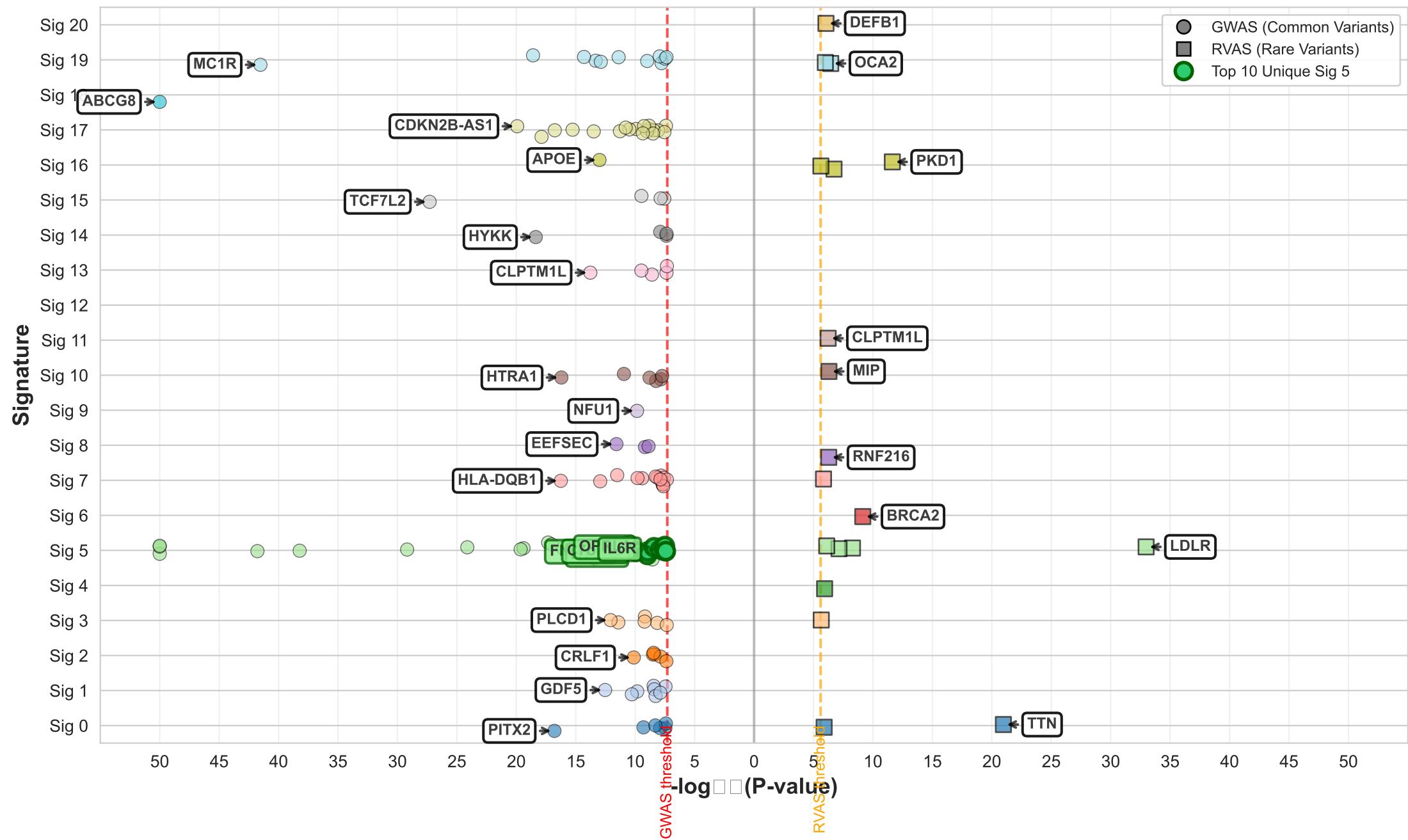


### A. Genetic Associations: GWAS (left) and RVAS (right)



Signature Categories:

- Sig 0: Cardiac Arrhythmias
- Sig 1: Musculoskeletal
- Sig 2: Upper GI/Esophageal
- Sig 3: Mixed/General Medical
- Sig 4: Upper Respiratory
- Sig 5: Ischemic cardiovascular
- Sig 6: Metastatic Cancer
- Sig 7: Pain/Inflammation
- Sig 8: Gynecologic
- Sig 9: Spinal Disorders
- Sig 10: Ophthalmologic
- Sig 11: Cerebrovascular
- Sig 12: Renal/Urologic
- Sig 13: Male Urogenital
- Sig 14: Pulmonary/Smoking
- Sig 15: Metabolic/Diabetes
- Sig 16: Infectious/Critical Care
- Sig 17: Lower GI/Colon
- Sig 18: Hepatobiliary
- Sig 19: Dermatologic/Oncologic
- Sig 20: Health

#### Top 10 Unique Sig 5 Loci

1. FNDC3B  
rs1499813
2. HYOU1  
rs2509121
3. C7orf55  
rs4732365
4. OPRL1  
rs8121509
5. IL6R  
rs6687726
6. PLCG2  
rs35039495
7. NR2F2-AS1  
rs7168222
8. R3HDM2  
rs4760278
9. UNC5C  
4:96088139\_ATATG\_A
10. LIPC  
rs1532085

### B. Number of Associations per Signature

