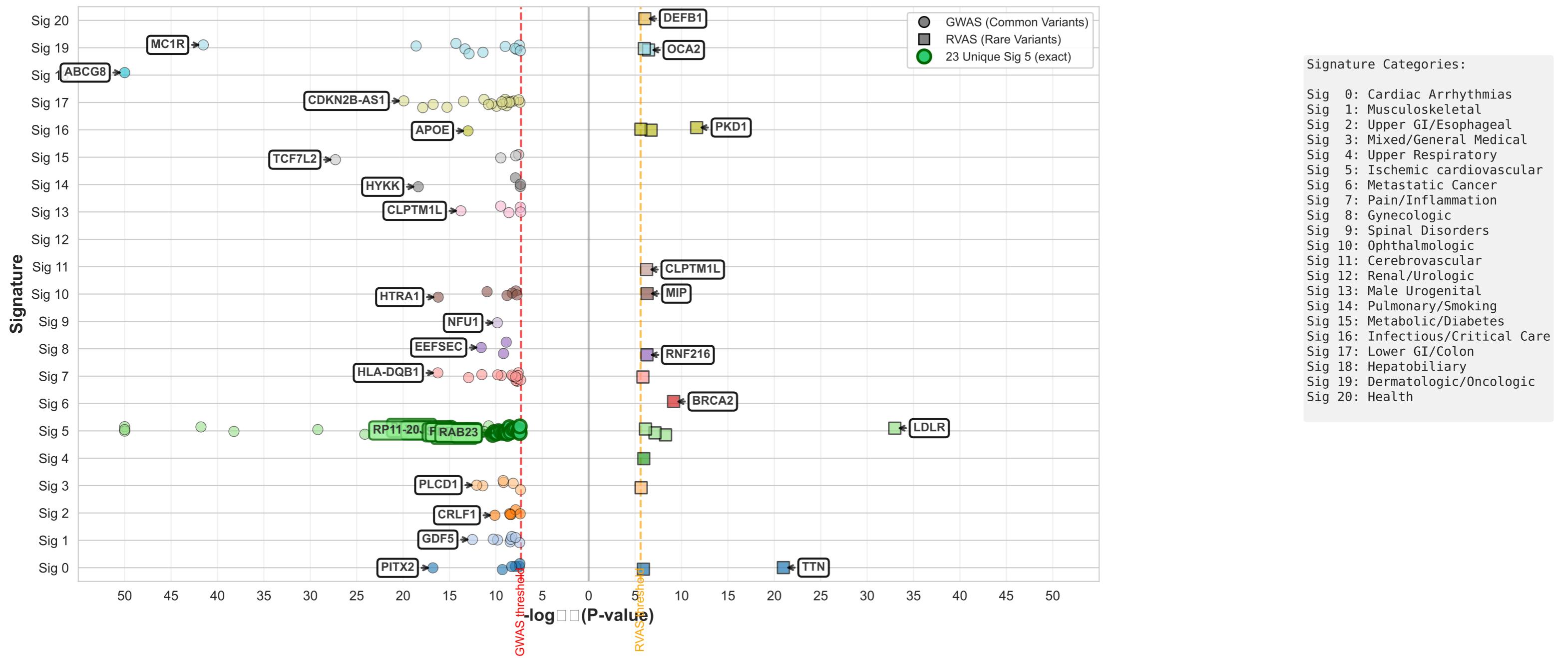


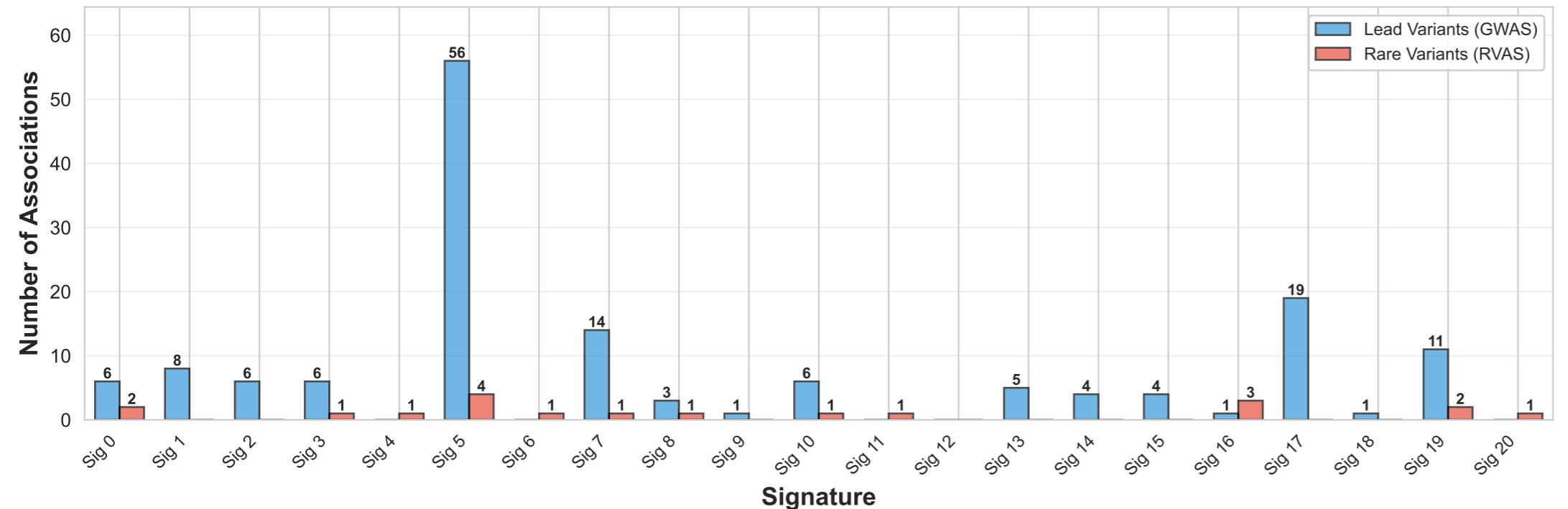
### A. Genetic Associations: GWAS (left) and RVAS (right)



#### 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

### B. Number of Associations per Signature



#### 23 Unique Sig 5 Loci (exact matching)

- |                 |                   |
|-----------------|-------------------|
| 1. PDGF         | 13. C7orf55       |
| 2. ZNF259       | 14. HLA-DOB       |
| 3. RP11-20J15.3 | 15. WWP2          |
| 4. CFDP1        | 16. OPRL1         |
| 5. SCARB1       | 17. RP11-306G20.1 |
| 6. FNDC3B       | 18. IL6R          |
| 7. C1S          | 19. PLCG2         |
| 8. RAB23        | 20. NR2F2-AS1     |
| 9. SMAD3        | 21. R3HDM2        |
| 10. ARMS2       | 22. UNC5C         |
| 11. HY0U1       | 23. LIPC          |
| 12. EHBPI       |                   |