

GeDiPNet Shared-Gene Disease Pairs

Similarity: Jaccard index on shared curated genes (disease_gdp). Significance: upper-tail hypergeometric test ($P(X \geq k)$), Benjamini-Hochberg FDR-corrected across all tested pairs. Corroborated Shared Genes: count of shared genes backed by ≥ 2 distinct disease_gdp.main_source values combined across both diseases (e.g. GWAS-backed for one, ClinVar-backed for the other still counts); Shared Gene Names lists each gene's own source count in parentheses. Overlap Coefficient: shared genes / MIN(each disease's own total gene count) -- complements the Jaccard-based Similarity Score by showing how much of the SMALLER disease's entire known gene-set is covered by this pair, which Jaccard (dividing by the union) can understate. Shared Cluster: cluster id if both diseases fall in the same label-propagation cluster (scripts/build_disease_clusters.php), blank otherwise. See scripts/build_related.php on gedipnet.bicnirrh.res.in. Data as of: 2026-10-14 03:00:13. Filters applied: disease name contains "Thiamine metabolism dysfunction syndrome" (5 matching pairs). · Rows: 5 · Generated: 2026-10-14 15:41:25

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Systemic lupus erythematosus	Thiamine metabolism dysfunction syndrome	1	1	SLC25A19 (3)	0.00152	0.50000	8.314e-2	8.429e-2	
Lymphocytic leukemia	Thiamine metabolism dysfunction syndrome	1	1	TPK1 (4)	0.00855	0.50000	1.488e-2	1.650e-2	
Microcephaly	Thiamine metabolism dysfunction syndrome	1	1	SLC25A19 (3)	0.00926	0.50000	1.372e-2	1.528e-2	
Amish lethal microcephaly	Thiamine metabolism dysfunction syndrome	1	1	SLC25A19 (6)	0.33333	1.00000	1.299e-4	3.931e-4	
Leigh syndrome	Thiamine metabolism dysfunction syndrome	2	2	SLC25A19 (4), TPK1 (4)	0.01852	1.00000	4.784e-5	2.166e-4	