

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: 2026-10-10 03:00:13. Filters applied: disease name contains "neurometabolic disorder due to serine deficiency" (5 matching pairs). · Rows: 5 · Generated: 2026-10-10 02:34:46

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
neurometabolic disorder due to serine deficiency	Neuropathy	1	1	PHGDH (2)	0.04545	0.33333	3.697e-3	4.735e-3	
neurometabolic disorder due to serine deficiency	Osteomyelitis	1	1	PHGDH (2)	0.08333	0.33333	1.753e-3	2.609e-3	
neurometabolic disorder due to serine deficiency	Phosphoserine phosphatase deficiency	1	1	PSPH (3)	0.25000	1.00000	1.948e-4	5.354e-4	
Amino acid metabolism disorder	neurometabolic disorder due to serine deficiency	2	2	PHGDH (2), PSPH (3)	0.07143	0.66667	8.216e-6	4.114e-5	
Macular telangiectasia	neurometabolic disorder due to serine deficiency	2	2	PHGDH (2), PSPH (2)	0.11765	0.66667	2.656e-6	1.444e-5	