

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: 2026-10-11 03:00:14. Filters applied: disease name contains "Pelizaeus-merzbacher disease" (5 matching pairs). · Rows: 5 · Generated: 2026-10-11 12:37:55

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Hypomyelinating leukodystrophy	Pelizaeus-merzbacher disease	4	4	AIMP1 (6), HSPD1 (5), GJC2 (6), MAL (4)	0.12121	0.66667	1.751e-10	1.704e-9	
Pelizaeus-merzbacher disease	Spastic paraplegia, x-linked	2	1	PLP1 (8), RAB9B (1)	0.25000	0.66667	3.795e-7	2.393e-6	
hypomyelinating leukodystrophy 2	Pelizaeus-merzbacher disease	1	1	GJC2 (3)	0.14286	1.00000	3.897e-4	8.665e-4	
hypomyelinating leukodystrophy 3	Pelizaeus-merzbacher disease	1	1	AIMP1 (3)	0.14286	1.00000	3.897e-4	8.665e-4	
Metachromatic leukodystrophy	Pelizaeus-merzbacher disease	1	1	MAL (2)	0.07143	0.16667	3.114e-3	4.096e-3	