

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 "Spastic paraplegia, x-linked" (5 matching pairs). · Rows: 5 · Generated: 2026-10-11 15:40:35

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Hereditary spastic paraplegia	Spastic paraplegia, x-linked	3	1	SPAST (1), PLP1 (3), RAB9B (1)	0.02941	1.00000	2.739e-7	1.783e-6	
Pelizaeus-merzbacher disease	Spastic paraplegia, x-linked	2	1	PLP1 (8), RAB9B (1)	0.25000	0.66667	3.795e-7	2.393e-6	
Auditory neuropathy	Spastic paraplegia, x-linked	2	1	PLP1 (3), RAB9B (1)	0.06061	0.66667	1.175e-5	5.746e-5	
Littles disease	Spastic paraplegia, x-linked	1	0	SPAST (1)	0.12500	0.33333	9.739e-4	1.665e-3	
Atypical femoral fracture	Spastic paraplegia, x-linked	1	1	SPAST (2)	0.02500	0.33333	7.192e-3	8.509e-3	