

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 "Lig4 syndrome" (5 matching pairs). · Rows: 5 · Generated: 2026-10-11 16:33:19

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Lig4 syndrome	Spondylosis	1	1	LIG4 (5)	0.03125	0.50000	3.893e-3	4.941e-3	
Lig4 syndrome	Omenn syndrome	1	1	LIG4 (5)	0.08333	0.50000	1.298e-3	2.063e-3	
hereditary nonpolyposis colon cancer	Lig4 syndrome	1	1	XRCC4 (2)	0.10000	0.50000	1.039e-3	1.739e-3	
Dubowitz syndrome	Lig4 syndrome	1	1	LIG4 (4)	0.25000	0.50000	2.598e-4	6.509e-4	
Dna ligase iv deficiency	Lig4 syndrome	1	1	LIG4 (6)	0.33333	1.00000	1.299e-4	3.931e-4	