

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 "severe combined immunodeficiency due to DNA-PKcs deficiency" (5 matching pairs). · Rows: 5 · Generated: 2026-10-10 01:38:27

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Immunodeficiency	severe combined immunodeficiency due to DNA-PKcs deficiency	1	1	PRKDC (4)	0.00714	1.00000	9.027e-3	1.034e-2	
Lung disease	severe combined immunodeficiency due to DNA-PKcs deficiency	1	1	PRKDC (3)	0.00980	1.00000	6.559e-3	7.816e-3	
Adenoid cystic carcinoma	severe combined immunodeficiency due to DNA-PKcs deficiency	1	1	PRKDC (2)	0.00990	1.00000	6.494e-3	7.751e-3	
Severe combined immunodeficiency	severe combined immunodeficiency due to DNA-PKcs deficiency	1	1	PRKDC (5)	0.01923	1.00000	3.312e-3	4.310e-3	
Hepatic encephalopathy	severe combined immunodeficiency due to DNA-PKcs deficiency	1	1	PRKDC (3)	0.06667	1.00000	9.092e-4	1.576e-3	57