

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 "T-B+ severe combined immunodeficiency due to gamma chain deficiency" (5 matching pairs). · Rows: 5 · Generated: 2026-10-10 01:38:22

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
T-B+ severe combined immunodeficiency due to gamma chain deficiency	X-linked severe combined immunodeficiency	1	1	IL2RG (2)	0.50000	1.00000	6.494e-5	2.331e-4	
Combined immunodeficiency, x-linked	T-B+ severe combined immunodeficiency due to gamma chain deficiency	1	1	IL2RG (3)	0.33333	1.00000	1.299e-4	3.931e-4	
T-B+ severe combined immunodeficiency due to gamma chain deficiency	X-linked combined immunodeficiency diseases	1	1	IL2RG (3)	0.25000	1.00000	1.948e-4	5.354e-4	
Omenn syndrome	T-B+ severe combined immunodeficiency due to gamma chain deficiency	1	1	IL2RG (4)	0.09091	1.00000	6.494e-4	1.241e-3	
Sezary syndrome	T-B+ severe combined immunodeficiency due to gamma chain deficiency	1	1	IL2RG (2)	0.03571	1.00000	1.753e-3	2.609e-3	