

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: 2026-10-20 03:00:20. Filters applied: disease name contains "Severe combined immunodeficiency, t cell-negative, b-cell/natural killer-cell positive" (5 matching pairs). · Rows: 5 · Generated: 2026-10-20 04:46:39

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Cd45 deficiency	Severe combined immunodeficiency, t cell-negative, b-cell/natural killer-cell positive	1	0	PTPRC (1)	0.25000	1.00000	1.937e-4	4.414e-4	
Immunodeficiency 19	Severe combined immunodeficiency, t cell-negative, b-cell/natural killer-cell positive	1	1	CD3D (2)	0.25000	1.00000	1.937e-4	4.414e-4	
Omenn syndrome	Severe combined immunodeficiency, t cell-negative, b-cell/natural killer-cell positive	2	1	IL7R (4), PTPRC (1)	0.10526	0.66667	3.400e-6	1.937e-5	
Immunodeficiency 104	Severe combined immunodeficiency, t cell-negative, b-cell/natural killer-cell positive	2	2	IL7R (2), PTPRC (2)	0.50000	1.00000	2.501e-8	1.874e-7	
Severe combined immunodeficiency, t cell-negative, b-cell/natural killer-cell positive	T-B+ severe combined immunodeficiency	3	0	IL7R (1), PTPRC (1), CD3D (1)	0.16667	1.00000	1.098e-9	9.456e-9	