

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 "PAX5-related B lymphopenia and autism spectrum disorder" (5 matching pairs). · Rows: 5 · Generated: 2026-10-10 08:32:15

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
leukemia, acute lymphoblastic, susceptibility to, 3	PAX5-related B lymphopenia and autism spectrum disorder	1	0	PAX5 (1)	0.50000	1.00000	6.494e-5	2.331e-4	
B-lymphoblastic leukemia/lymphoma	PAX5-related B lymphopenia and autism spectrum disorder	1	1	PAX5 (2)	0.05000	1.00000	1.234e-3	1.986e-3	
Lymphoblastic leukemia	PAX5-related B lymphopenia and autism spectrum disorder	1	1	PAX5 (3)	0.01724	1.00000	3.702e-3	4.735e-3	
Anxiety disorder	PAX5-related B lymphopenia and autism spectrum disorder	1	1	PAX5 (2)	0.00680	1.00000	9.482e-3	1.078e-2	
Iga nephropathy	PAX5-related B lymphopenia and autism spectrum disorder	1	1	PAX5 (2)	0.00490	1.00000	1.318e-2	1.469e-2	