

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 "Mental retardation, autosomal recessive 54" (5 matching pairs). · Rows: 5 · Generated: 2026-10-20 04:45:28

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Mental retardation, autosomal recessive 54	Nonsyndromic intellectual disability	1	1	TNIK (5)	0.00699	1.00000	9.168e-3	1.032e-2	
Juvenile arthritis	Mental retardation, autosomal recessive 54	1	1	TNIK (2)	0.00769	1.00000	8.329e-3	9.469e-3	
Dermatologic disorder	Mental retardation, autosomal recessive 54	1	1	TNIK (2)	0.01449	1.00000	4.390e-3	5.339e-3	
Frontotemporal dementia	Mental retardation, autosomal recessive 54	1	1	TNIK (2)	0.01613	1.00000	3.939e-3	4.834e-3	
Dyshidrosis	Mental retardation, autosomal recessive 54	1	1	TNIK (2)	0.16667	1.00000	3.228e-4	6.412e-4	