

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 "optic atrophy 9" (5 matching pairs). · Rows: 5 · Generated: 2026-10-10 19:24:50

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Brain atrophy	optic atrophy 9	1	1	ACO2 (2)	0.09091	1.00000	6.494e-4	1.241e-3	
Optic atrophy	optic atrophy 9	1	1	ACO2 (7)	0.00549	1.00000	1.175e-2	1.316e-2	
optic atrophy 9	Respiratory system disease	1	1	ACO2 (2)	0.00413	1.00000	1.565e-2	1.728e-2	
Mitochondrial disease	optic atrophy 9	1	1	ACO2 (3)	0.00412	1.00000	1.572e-2	1.733e-2	
optic atrophy 9	Retinitis pigmentosa	1	1	ACO2 (2)	0.00280	1.00000	2.312e-2	2.493e-2	