

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: 2026-10-11 03:00:14. Filters applied: disease name contains "Coenzyme q10 deficiency" (9 matching pairs). · Rows: 9 · Generated: 2026-10-11 17:30:47

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Alzheimer disease	Primary coenzyme q10 deficiency	1	1	COQ6 (2)	0.00045	0.50000	2.673e-1	2.675e-1	
Distal hereditary motor neuropathy	Primary coenzyme q10 deficiency	1	1	COQ7 (5)	0.02632	0.50000	4.671e-3	5.787e-3	
Autosomal recessive ataxia	Coenzyme q10 deficiency	1	1	COQ8A (7)	0.05882	0.20000	3.891e-3	4.941e-3	
Coenzyme q10 deficiency	Shy-drager syndrome	1	1	COQ2 (4)	0.06667	0.33333	2.336e-3	3.243e-3	
Ataxia with oculomotor apraxia and hypoalbuminemia	Coenzyme q10 deficiency	1	1	APTX (3)	0.07692	1.00000	7.793e-4	1.405e-3	
Coenzyme q10 deficiency	Deafness, encephaloneuropathy, obesity, valvulopathy syndrome	1	1	PDSS1 (5)	0.07692	1.00000	7.793e-4	1.405e-3	
Coenzyme q10 deficiency	Coq7-related distal hereditary motor neuropathy	1	1	COQ7 (4)	0.07692	1.00000	7.793e-4	1.405e-3	
Coq7-related distal hereditary motor neuropathy	Primary coenzyme q10 deficiency	1	1	COQ7 (4)	0.33333	1.00000	1.299e-4	3.931e-4	
Coenzyme q10 deficiency	Primary coenzyme q10 deficiency	2	2	COQ6 (5), COQ7 (5)	0.15385	1.00000	5.568e-7	3.406e-6	