

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 "Niemann-pick disease" (8 matching pairs). · Rows: 8 · Generated: 2026-10-11 01:25:58

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	Niemann-pick disease	2	1	ACYP1 (1), NPC2 (8)	0.11765	0.25000	1.061e-5	5.234e-5	
Acid sphingomyelinase deficiency	Niemann-pick disease	1	1	SMPD1 (7)	0.11111	1.00000	5.195e-4	1.061e-3	
Cataplexy	Niemann-pick disease	1	1	NPC1 (8)	0.11111	1.00000	5.195e-4	1.061e-3	
Cholesterol ester storage disease	Niemann-pick disease	1	1	LIPA (5)	0.11111	1.00000	5.195e-4	1.061e-3	
lysosomal acid lipase deficiency	Niemann-pick disease	1	1	LIPA (3)	0.11111	1.00000	5.195e-4	1.061e-3	
Niemann-pick disease	Visceral acid sphingomyelinase deficiency	1	1	SMPD1 (7)	0.11111	1.00000	5.195e-4	1.061e-3	
Niemann-pick disease	Wolman disease	1	1	LIPA (6)	0.11111	1.00000	5.195e-4	1.061e-3	
Niemann-pick disease	Ophthalmoplegia	1	1	NPC1 (8)	0.10000	0.50000	1.039e-3	1.739e-3	