

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: 2026-10-12 03:00:13. Filters applied: disease name contains "Axonal neuropathy" (20 matching pairs). · Rows: 20 · Generated: 2026-10-12 20:52:57

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Charcot-marie-tooth disease	Giant axonal neuropathy	2	2	GAN (7), DCAF8 (6)	0.01504	1.00000	7.294e-5	2.610e-4	
Ocular anomalies with axonal neuropathy and developmental delay	Parenti-mignot neurodevelopmental syndrome	1	1	CHD5 (4)	0.33333	1.00000	1.299e-4	3.931e-4	
1p36.33 duplication syndrome	Ocular anomalies with axonal neuropathy and developmental delay	1	1	ATAD3A (2)	0.20000	0.50000	3.896e-4	8.665e-4	
Anterior segment dysgenesis	Axonal neuropathy	1	1	GBF1 (2)	0.04167	1.00000	1.494e-3	2.313e-3	
Axonal neuropathy	Partial epilepsy	1	0	GBF1 (1)	0.02222	1.00000	2.858e-3	3.806e-3	
Arthritis	Giant axonal neuropathy	1	1	GAN (7)	0.03571	0.50000	3.374e-3	4.374e-3	
Axonal neuropathy	Congenital cataract	1	1	GBF1 (2)	0.01639	1.00000	3.897e-3	4.941e-3	
Ocular anomalies with axonal neuropathy and developmental delay	Pontocerebellar hypoplasia	1	1	ATAD3A (5)	0.03030	0.50000	4.023e-3	5.086e-3	
Axonal neuropathy	Generalized epilepsy	1	0	GBF1 (1)	0.01515	1.00000	4.221e-3	5.316e-3	
Cerebellar hypoplasia/atrophy, epilepsy, and global developmental delay	Ocular anomalies with axonal neuropathy and developmental delay	1	1	ATAD3A (2)	0.02632	0.50000	4.671e-3	5.787e-3	
Axonal neuropathy	Digestive system disease	1	0	GBF1 (1)	0.01064	1.00000	6.040e-3	7.267e-3	
Giant axonal neuropathy	Peripheral nervous system disease	1	1	GAN (7)	0.01818	0.50000	6.872e-3	8.155e-3	243
Giant axonal neuropathy	Non-neoplastic peripheral nervous system disease	1	1	GAN (7)	0.01786	0.50000	7.002e-3	8.288e-3	243
Axonal neuropathy with neuromyotonia	Myopathy	1	1	HINT1 (3)	0.00885	1.00000	7.274e-3	8.577e-3	14
Axonal neuropathy with neuromyotonia	Charcot-marie-tooth disease	1	1	HINT1 (5)	0.00752	1.00000	8.573e-3	9.903e-3	
Axonal neuropathy with neuromyotonia	Peripheral neuropathy	1	1	HINT1 (3)	0.00518	1.00000	1.247e-2	1.394e-2	
Axonal neuropathy with neuromyotonia	Respiratory system disease	1	1	HINT1 (4)	0.00413	1.00000	1.565e-2	1.728e-2	
Neuroblastoma	Ocular anomalies with axonal neuropathy and developmental delay	1	1	CHD5 (2)	0.00654	0.50000	1.952e-2	2.128e-2	

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Axonal neuropathy with neuromyotonia	Venous thromboembolism	1	1	HINT1 (4)	0.00292	1.00000	2.221e-2	2.404e-2	
Giant axonal neuropathy	Peripheral neuropathy	1	1	GAN (7)	0.00515	0.50000	2.478e-2	2.653e-2	243