

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 "Neurodegenerative disease" (25 matching pairs). · Rows: 25 · Generated: 2026-10-20 08:55:19

Disease A	Disease B	Share d Genes	Corroborate d Shared Genes	Shared Gene Names	Similari ty Score	Overlap Coefficie nt	p- value	FDR Q- value	Shared Cluster
Catel-manzke syndrome	Neurodegenerative disease	1	1	KYNU (2)	0.02222	0.50000	5.545 e-3	6.582 e-3	
Masp2 deficiency	Neurodegenerative disease	1	1	TARDBP (2)	0.02222	0.50000	5.545 e-3	6.582 e-3	
Neurodegenerative disease	Spastic paraplegia 83, autosomal recessive	1	0	HPDL (1)	0.02273	1.00000	2.776 e-3	3.558 e-3	
Amyotrophic lateral sclerosis type 10	Neurodegenerative disease	1	1	TARDBP (4)	0.02273	1.00000	2.776 e-3	3.558 e-3	
Neurodegenerative disease	Regressive neurodevelopmental disorder dystonia seizures	1	1	IRF2BPL (3)	0.02273	1.00000	2.776 e-3	3.558 e-3	
Neurodegenerative disease	Neurodevelopmental disorder with regression, abnormal movements, loss of speech, and seizures	1	1	IRF2BPL (3)	0.02273	1.00000	2.776 e-3	3.558 e-3	
Neurodegenerative disease	Neurodevelopmental disorder with progressive spasticity and brain white matter abnormalities spastic paraplegia 83, autosomal recessive	1	0	HPDL (1)	0.02273	1.00000	2.776 e-3	3.558 e-3	
Neurodegenerative disease	Neurodevelopmental disorder with progressive spasticity and brain white matter abnormalities	1	0	HPDL (1)	0.02273	1.00000	2.776 e-3	3.558 e-3	
Hydroxykynureninuria	Neurodegenerative disease	1	1	KYNU (3)	0.02273	1.00000	2.776 e-3	3.558 e-3	
Choreoacanthocytosis	Neurodegenerative disease	1	1	VPS13A (3)	0.02273	1.00000	2.776 e-3	3.558 e-3	
Cataract 30, pulverulent	Neurodegenerative disease	1	1	VIM (3)	0.02273	1.00000	2.776 e-3	3.558 e-3	
Genetic neurodegenerative disease	Spastic paraplegia 10, autosomal dominant	1	1	KIF5A (2)	0.25000	1.00000	1.937 e-4	4.414 e-4	544
Genetic neurodegenerative disease	Severe neonatal myoclonus	1	1	KIF5A (2)	0.25000	1.00000	1.937 e-4	4.414 e-4	544
Genetic neurodegenerative disease	Inherited neurodegenerative disorder	1	1	KIF5A (2)	0.25000	1.00000	1.937 e-4	4.414 e-4	544
Genetic neurodegenerative disease	Neurodegeneration, infantile-onset, biotin-responsive	1	1	SLC5A6 (2)	0.25000	1.00000	1.937 e-4	4.414 e-4	
Genetic neurodegenerative disease	Neurodegeneration, infantile-onset, with optic atrophy and brain abnormalities	1	1	BORCS8 (2)	0.25000	1.00000	1.937 e-4	4.414 e-4	
Early-infantile neurological disorder with severe intellectual disability, hypotonia and congenital heart disease	Genetic neurodegenerative disease	1	1	BORCS8 (2)	0.25000	1.00000	1.937 e-4	4.414 e-4	

Disease A	Disease B	Share d Genes	Corroborate d Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	p- value	FDR Q- value	Shared Cluster
Genetic neurodegenerative disease	Peripheral motor neuropathy, childhood-onset, biotin-responsive	1	1	SLC5A6 (2)	0.25000	1.00000	1.937 e-4	4.414 e-4	
Genetic neurodegenerative disease	Sodium-dependent multivitamin transporter deficiency	1	1	SLC5A6 (2)	0.25000	1.00000	1.937 e-4	4.414 e-4	
Amyotrophic lateral sclerosis, susceptibility to, 25	Genetic neurodegenerative disease	1	1	KIF5A (3)	0.25000	1.00000	1.937 e-4	4.414 e-4	544
Neurodegenerative disease	Splenomegaly	3	3	APP (2), PSEN1 (2), MAPT (2)	0.04918	0.15000	2.199 e-5	1.149 e-4	
Amnesia	Neurodegenerative disease	3	3	APP (2), IL6 (2), NGF (2)	0.05085	0.16667	1.580 e-5	8.374 e-5	
Neurodegeneration with brain iron accumulation	Neurodegenerative disease	3	3	FTL (4), PANK2 (4), FTH1 (6)	0.05455	0.21429	7.103 e-6	3.894 e-5	
Learning disorders	Neurodegenerative disease	5	5	APP (2), PSEN1 (2), MAPT (2), HMOX1 (2), APOD (2)	0.06667	0.13889	4.589 e-8	3.389 e-7	
Degenerative disorder	Neurodegenerative disease	40	38	APP (2), PSEN1 (2), SERPINA1 (2), MAPT (2), EPO (2), GSTO1 (2), HMOX1 (2), NGFR (2), SNCA (2), SOD2 (2), IL6 (2), NGF (2)	0.90909	1.00000	2.661 e-116	1.271 e-114	