GeDiPNet Shared-Gene Disease Pairs

Similarity: Jaccard index on shared curated genes (disease_gdp). Significance: upper-tail hypergeometric test (P(X>=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 "Developmental disorder with hypotonia, epilepsy, and cerebral/cerebellar atrophy" (5 matching pairs). · Rows: 5 · Generated: 2026-10-20 03:56:37

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Developmental disorder with hypotonia, epilepsy, and cerebral/cerebellar atrophy	Spinocerebellar ataxia	1	1	CACNA1G (6)	0.00943	1.00000	6.779e-3	7.882e-3	
Developmental disorder with hypotonia, epilepsy, and cerebral/cerebellar atrophy	Spastic ataxia	1	1	CACNA1G (2)	0.01408	1.00000	4.520e-3	5.478e-3	
Autosomal recessive mental retardation	Developmental disorder with hypotonia, epilepsy, and cerebral/cerebellar atrophy	1	0	CACNA1G (1)	0.04762	1.00000	1.291e-3	1.888e-3	
Developmental disorder with hypotonia, epilepsy, and cerebral/cerebellar atrophy	Spinocerebellar ataxia type 42	1	1	CACNA1G (2)	0.50000	1.00000	6.457e-5	1.985e-4	
Developmental disorder with hypotonia, epilepsy, and cerebral/cerebellar atrophy	Spinocerebellar ataxia 42, early-onset, severe, with neurodevelopmental deficits	1	0	CACNA1G (1)	0.50000	1.00000	6.457e-5	1.985e-4	