# 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 "Neurodevelopmental disorder with epilepsy and brain atrophy" (5 matching pairs). · Rows: 5 · Generated: 2026-10-20 05:59:16

| Disease A | Disease B | Shared Genes | Corroborated Shared Genes | Shared Gene Names | Similarity Score | Overlap Coefficient | P-value | FDR Q-value | Shared Cluster |
|---|---|---|---|---|---|---|---|---|---|
| Developmental and epileptic encephalopathy | Neurodevelopmental disorder with epilepsy and brain atrophy | 1 | 1 | ATP6V0A1 (5) | 0.00431 | 1.00000 | 1.491e-2 | 1.630e-2 | |
| Neurodevelopmental disorder with epilepsy and brain atrophy | Seizures | 1 | 1 | ATP6V0A1 (2) | 0.00433 | 1.00000 | 1.485e-2 | 1.628e-2 | |
| Cerebellar ataxia | Neurodevelopmental disorder with epilepsy and brain atrophy | 1 | 1 | ATP6V0A1 (2) | 0.00820 | 1.00000 | 7.813e-3 | 8.931e-3 | |
| Developmental disorder | Neurodevelopmental disorder with epilepsy and brain atrophy | 1 | 0 | ATP6V0A1 (1) | 0.01111 | 1.00000 | 5.746e-3 | 6.781e-3 | |
| Esophageal atresia | Neurodevelopmental disorder with epilepsy and brain atrophy | 1 | 1 | ATP6V0A1 (2) | 0.03030 | 1.00000 | 2.066e-3 | 2.785e-3 | |