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: 2026-10-21 11:03:08. Filters applied: disease name contains "Early-onset severe encephalopathy" (4 matching pairs). · Rows: 4 · Generated: 2026-10-21 06:05:35

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Carcinoma	Early-onset severe encephalopathy	1	1	MDH2 (2)	0.00118	1.00000	5.462e-2	5.616e-2	
Developmental and epileptic encephalopathy	Early-onset severe encephalopathy	1	1	MDH2 (5)	0.00431	1.00000	1.491e-2	1.630e-2	
Early-onset severe encephalopathy	Epithelial ovarian carcinoma	1	1	MDH2 (2)	0.03571	1.00000	1.743e-3	2.422e-3	
Early-onset severe encephalopathy	Epileptic encephalopathy, early infantile, 51	1	0	MDH2 (1)	0.50000	1.00000	6.457e-5	1.985e-4	