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 "Microcephaly, seizures, spasticity, and brain calcification" (5 matching pairs). · Rows: 5 · Generated: 2026-10-20 08:22:37

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Microcephaly	Microcephaly, seizures, spasticity, and brain calcification	1	0	PCDH12 (1)	0.00625	1.00000	1.027e-2	1.144e-2	
Cerebellar ataxia	Microcephaly, seizures, spasticity, and brain calcification	1	1	PCDH12 (2)	0.00820	1.00000	7.813e-3	8.931e-3	
Marshall syndrome	Microcephaly, seizures, spasticity, and brain calcification	1	1	PCDH12 (2)	0.05000	1.00000	1.227e-3	1.808e-3	
Exudative retinopathy	Microcephaly, seizures, spasticity, and brain calcification	1	1	PCDH12 (2)	0.12500	1.00000	4.520e-4	8.260e-4	
Diencephalic mesencephalic junction dysplasia	Microcephaly, seizures, spasticity, and brain calcification	1	1	PCDH12 (6)	0.25000	1.00000	1.937e-4	4.414e-4	