

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: 2026-10-11 03:00:14. Filters applied: disease name contains "autosomal recessive primary microcephaly" (6 matching pairs). · Rows: 6 · Generated: 2026-10-11 07:47:38

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
autosomal recessive primary microcephaly	Congenital malformation syndromes associated with short stature	1	1	CDK5RAP2 (2)	0.10000	0.25000	1.558e-3	2.376e-3	
autosomal recessive primary microcephaly	Corpus callosum agenesis	1	1	CDK5RAP2 (2)	0.16667	0.50000	5.195e-4	1.061e-3	
autosomal recessive primary microcephaly	Urethral syndrome	1	1	CDK5RAP2 (2)	0.16667	0.50000	5.195e-4	1.061e-3	
autosomal recessive primary microcephaly	Seckel syndrome	2	2	CENPE (4), CDK5RAP2 (2)	0.09524	0.50000	7.733e-6	3.896e-5	
autosomal recessive primary microcephaly	Congenital microcephaly	3	3	ASPM (2), CDK5RAP2 (2), STIL (2)	0.09091	0.75000	2.951e-8	2.238e-7	
autosomal recessive primary microcephaly	Primary microcephaly	4	4	CENPE (4), ASPM (4), CDK5RAP2 (4), STIL (4)	0.11111	1.00000	2.236e-11	2.372e-10	