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 and intellectual disability" (9 matching pairs). · Rows: 9 · Generated: 2026-10-20 02:57:43

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Microcephaly and intellectual disability	Primary microcephaly	2	2	MCPH1 (5), TAF13 (4)	0.05000	0.40000	5.230e-5	1.985e-4	
Glucose intolerance	Microcephaly and intellectual disability	1	0	EIF2S3 (1)	0.16667	1.00000	3.228e-4	6.412e-4	
Hypogonadotropic hypogonadism 14 with or without anosmia	Microcephaly and intellectual disability	1	0	WDR11 (1)	0.16667	1.00000	3.228e-4	6.412e-4	
Jawad syndrome	Microcephaly and intellectual disability	1	0	RBBP8 (1)	0.16667	1.00000	3.228e-4	6.412e-4	
Mehmo syndrome	Microcephaly and intellectual disability	1	1	EIF2S3 (2)	0.16667	1.00000	3.228e-4	6.412e-4	
Mental retardation, autosomal recessive 60	Microcephaly and intellectual disability	1	0	TAF13 (1)	0.16667	1.00000	3.228e-4	6.412e-4	
Microcephaly and intellectual disability	Microcephaly with mental retardation and digital anomalies	1	0	RBBP8 (1)	0.16667	1.00000	3.228e-4	6.412e-4	
Microcephaly and intellectual disability	Uinary system neoplasms	1	1	WDR11 (2)	0.14286	0.50000	6.456e-4	1.087e-3	
Hereditary breast carcinoma	Microcephaly and intellectual disability	1	0	MCPH1 (1)	0.12500	0.33333	9.682e-4	1.496e-3	