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 "Maternally-inherited diabetes and deafness" (5 matching pairs). · Rows: 5 · Generated: 2026-10-20 05:04:32

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Maternally-inherited diabetes and deafness	Mitochondrial disease	1	0	TRNL1 (1)	0.00402	1.00000	1.601e-2	1.741e-2	
Maternally-inherited diabetes and deafness	Optic atrophy	1	0	TRNL1 (1)	0.00526	1.00000	1.220e-2	1.348e-2	
Macular dystrophy	Maternally-inherited diabetes and deafness	1	0	TRNL1 (1)	0.02000	1.00000	3.164e-3	4.003e-3	
Maternally-inherited diabetes and deafness	Retinal dystrophy	1	0	TRNL1 (1)	0.05556	1.00000	1.098e-3	1.651e-3	
Maternally-inherited diabetes and deafness	Sensorineural hearing impairment	1	0	TRNL1 (1)	0.20000	1.00000	2.583e-4	5.384e-4	