

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: 2026-10-20 03:00:20. Filters applied: disease name contains "Cataract, congenital nuclear, autosomal recessive 2" (5 matching pairs). · Rows: 5 · Generated: 2026-10-20 03:39:54

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Cataract 22, multiple types	Cataract, congenital nuclear, autosomal recessive 2	1	0	CRYBB3 (1)	0.50000	1.00000	6.457e-5	1.985e-4	
Cataract, congenital nuclear, autosomal recessive 2	Non-syndromic cataract	1	1	CRYBB3 (2)	0.25000	1.00000	1.937e-4	4.414e-4	
Anterior polar cataract	Cataract, congenital nuclear, autosomal recessive 2	1	1	CRYBB3 (3)	0.20000	1.00000	2.583e-4	5.384e-4	
Cataract, congenital nuclear, autosomal recessive 2	Embryonal nuclear cataract	1	1	CRYBB3 (2)	0.16667	1.00000	3.228e-4	6.412e-4	
Cataract, congenital nuclear, autosomal recessive 2	Cystitis	1	1	CRYBB3 (2)	0.06250	1.00000	9.685e-4	1.496e-3	