

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 autosomal dominant" (10 matching pairs). · Rows: 10 · Generated: 2026-10-20 03:38:22

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Cataract 12, multiple types	Cataract autosomal dominant bfsp2-related	1	0	BFSP2 (1)	0.50000	1.00000	6.457e-5	1.985e-4	
Cataract 11, multiple types	Cataract autosomal dominant	1	0	PITX3 (1)	0.33333	1.00000	1.291e-4	3.269e-4	
Cataract 2, multiple types (often with microcornea)	Cataract autosomal dominant	1	0	CRYGC (1)	0.33333	1.00000	1.291e-4	3.269e-4	
Cataract autosomal dominant	Congenital cataract anterior segment dysgenesis syndrome	1	1	PITX3 (2)	0.33333	1.00000	1.291e-4	3.269e-4	
Cataract autosomal dominant bfsp2-related	Non-syndromic cataract	1	1	BFSP2 (2)	0.25000	1.00000	1.937e-4	4.414e-4	
Cataract autosomal dominant	Cataract-glaucoma syndrome	1	1	PITX3 (3)	0.25000	0.50000	2.583e-4	5.384e-4	
Cataract autosomal dominant bfsp2-related	Sutural cataract	1	1	BFSP2 (3)	0.14286	1.00000	3.874e-4	7.329e-4	
Cataract autosomal dominant bfsp2-related	Lamellar cataract	1	1	BFSP2 (3)	0.08333	1.00000	7.102e-4	1.174e-3	
Cataract autosomal dominant	Posterior polar cataract	1	1	PITX3 (3)	0.10000	0.50000	1.033e-3	1.574e-3	
Cataract autosomal dominant bfsp2-related	Strabismus	1	1	BFSP2 (2)	0.02703	1.00000	2.324e-3	3.054e-3	