

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: 2026-10-10 03:00:13. Filters applied: disease name contains "Congenital glaucoma" (17 matching pairs). · Rows: 17 · Generated: 2026-10-10 08:12:04

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Congenital glaucoma	Hydrophthalmos	6	6	TCF7L2 (2), CYP1B1 (2), TEK (3), MYOC (3), GPATCH3 (2), LTBP2 (3)	0.75000	1.00000	3.785e-22	7.870e-21	
Hydrophthalmos	Primary congenital glaucoma	3	1	CYP1B1 (1), TEK (2), LTBP2 (1)	0.37500	0.75000	1.315e-10	1.292e-9	
Congenital glaucoma	Primary congenital glaucoma	3	3	CYP1B1 (2), TEK (4), LTBP2 (3)	0.33333	0.75000	2.301e-10	2.206e-9	
Neonatal diabetes mellitus with congenital hypothyroidism	Neonatal diabetes-congenital hypothyroidism-congenital glaucoma-hepatic fibrosis-polycystic kidney syndrome	1	1	GLIS3 (6)	0.33333	1.00000	1.299e-4	3.931e-4	394
Mucocutaneous venous malformations	Primary congenital glaucoma	1	1	TEK (3)	0.20000	1.00000	2.598e-4	6.509e-4	
Bockenheimer syndrome	Primary congenital glaucoma	1	1	TEK (2)	0.20000	1.00000	2.598e-4	6.509e-4	
Microspherophakia	Primary congenital glaucoma	1	1	LTBP2 (5)	0.20000	1.00000	2.598e-4	6.509e-4	
glaucoma 3, primary congenital, d	Primary congenital glaucoma	1	1	LTBP2 (2)	0.20000	1.00000	2.598e-4	6.509e-4	
CYP1B1-related glaucoma with or without anterior segment dysgenesis	Primary congenital glaucoma	1	1	CYP1B1 (2)	0.20000	1.00000	2.598e-4	6.509e-4	
Congenital glaucoma	Mucocutaneous venous malformations	1	1	TEK (2)	0.12500	1.00000	4.546e-4	9.726e-4	
Bockenheimer syndrome	Congenital glaucoma	1	1	TEK (3)	0.12500	1.00000	4.546e-4	9.726e-4	
Congenital glaucoma	CYP1B1-related glaucoma with or without anterior segment dysgenesis	1	1	CYP1B1 (3)	0.12500	1.00000	4.546e-4	9.726e-4	
Congenital keratoglobus	Primary congenital glaucoma	1	0	LTBP2 (1)	0.16667	0.50000	5.195e-4	1.061e-3	
Neonatal diabetes-congenital hypothyroidism-congenital glaucoma-hepatic fibrosis-polycystic kidney syndrome	Periprosthetic osteolysis	1	1	GLIS3 (3)	0.07692	1.00000	7.793e-4	1.405e-3	394
Angle closure glaucoma	Neonatal diabetes-congenital hypothyroidism-congenital glaucoma-hepatic fibrosis-polycystic kidney syndrome	1	1	GLIS3 (2)	0.06667	1.00000	9.092e-4	1.576e-3	
Neonatal diabetes-congenital hypothyroidism-congenital glaucoma-hepatic fibrosis-polycystic kidney syndrome	Primary angle closure glaucoma	1	1	GLIS3 (3)	0.05882	1.00000	1.039e-3	1.739e-3	
Biliary atresia	Neonatal diabetes-congenital hypothyroidism-congenital glaucoma-hepatic fibrosis-polycystic kidney syndrome	1	1	GLIS3 (3)	0.03125	1.00000	2.013e-3	2.901e-3	