

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 "Retinal dystrophy" (143 matching pairs). · Rows: 143 · Generated: 2026-10-20 05:44:10

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Lung cancer	Retinal dystrophy and obesity	1	1	TUB (2)	0.00075	1.00000	8.581e-2	8.671e-2	
Coronary artery disease	Retinal dystrophy and obesity	1	1	TUB (2)	0.00087	1.00000	7.373e-2	7.485e-2	
Hearing loss	Retinal dystrophy and obesity	1	1	TUB (2)	0.00251	1.00000	2.563e-2	2.720e-2	
Retinal dystrophy and obesity	Retinitis pigmentosa	1	1	TUB (5)	0.00273	1.00000	2.357e-2	2.517e-2	
Retinal dystrophy with leukodystrophy	Retinitis pigmentosa	1	1	ACBD5 (2)	0.00273	1.00000	2.357e-2	2.517e-2	
Retinal dystrophy with or without extraocular anomalies	Retinitis pigmentosa	1	1	RCBTB1 (3)	0.00273	1.00000	2.357e-2	2.517e-2	
Retinal dystrophy, juvenile cataracts, and short stature syndrome	Retinitis pigmentosa	1	1	RDH11 (2)	0.00273	1.00000	2.357e-2	2.517e-2	
Ankylosing spondylitis	Gonadal dysgenesis, dysmorphic facies, retinal dystrophy, and myopathy	1	1	PPP2R3C (2)	0.00318	1.00000	2.021e-2	2.169e-2	
Gonadal dysgenesis, dysmorphic facies, retinal dystrophy, and myopathy	Sclerosing cholangitis	1	1	PPP2R3C (2)	0.00431	1.00000	1.491e-2	1.630e-2	
Optic atrophy	Retinal dystrophy, juvenile cataracts, and short stature syndrome	1	1	RDH11 (2)	0.00526	1.00000	1.220e-2	1.348e-2	
Retinal dystrophy with leukodystrophy	Thrombocytopenia	1	1	ACBD5 (2)	0.00699	1.00000	9.168e-3	1.032e-2	
Retinal dystrophy with inner retinal dysfunction and ganglion cell abnormalities	Vascular dementia	1	1	ITM2B (2)	0.00775	1.00000	8.264e-3	9.403e-3	
Gonadal dysgenesis, dysmorphic facies, retinal dystrophy, and myopathy	Spermatogenic failure	1	1	PPP2R3C (4)	0.00877	1.00000	7.296e-3	8.440e-3	
Essential tremor	Retinal dystrophy and obesity	1	1	TUB (3)	0.00990	1.00000	6.457e-3	7.555e-3	271
Eye disease	Retinal dystrophy, optic nerve edema, splenomegaly, anhidrosis, and migraine headache syndrome	1	1	ALPK1 (3)	0.01042	1.00000	6.134e-3	7.207e-3	
Retinal dystrophy with or without extraocular anomalies	Retinopathy	1	1	RCBTB1 (2)	0.01111	1.00000	5.746e-3	6.781e-3	
Brain injuries	Cerebellar dysplasia with cysts with or without retinal dystrophy	1	1	LAMA1 (2)	0.01235	1.00000	5.165e-3	6.162e-3	
Bothnia retinal dystrophy	Cone-rod dystrophy	1	1	RLBP1 (7)	0.01299	1.00000	4.907e-3	5.888e-3	

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Cone-rod dystrophy	Retinal dystrophy with leukodystrophy	1	1	ACBD5 (2)	0.01299	1.00000	4.907e-3	5.888e-3	
Cone-rod dystrophy	Retinal dystrophy with or without macular staphyloma	1	1	CFAP410 (4)	0.01299	1.00000	4.907e-3	5.888e-3	
Leber congenital amaurosis	Retinal dystrophy with or without macular staphyloma	1	1	CFAP410 (2)	0.01351	1.00000	4.713e-3	5.685e-3	
Cerebral amyloid angiopathy	Retinal dystrophy with inner retinal dysfunction and ganglion cell abnormalities	1	1	ITM2B (3)	0.01389	1.00000	4.584e-3	5.544e-3	
Bothnia retinal dystrophy	Macular degeneration	1	1	RLBP1 (7)	0.01449	1.00000	4.390e-3	5.339e-3	
Cone dystrophy	Retinal dystrophy with or without macular staphyloma	1	1	CFAP410 (2)	0.02500	1.00000	2.518e-3	3.269e-3	
Inherited retinal dystrophy	Microphthalmia with retinitis pigmentosa and ocular anomalies	1	1	C1QTNF5 (2)	0.05000	0.50000	2.323e-3	3.054e-3	
Cone rod dystrophy and hearing loss	Retinal dystrophy	1	1	CEP250 (6)	0.05263	0.50000	2.194e-3	2.917e-3	
Bothnia retinal dystrophy	Night blindness, congenital stationary	1	1	RLBP1 (7)	0.03571	1.00000	1.743e-3	2.422e-3	
Amyloidosis	Retinal dystrophy with inner retinal dysfunction and ganglion cell abnormalities	1	0	ITM2B (1)	0.03846	1.00000	1.614e-3	2.265e-3	
Autosomal recessive mental retardation	Cerebellar dysplasia with cysts with or without retinal dystrophy	1	0	LAMA1 (1)	0.04762	1.00000	1.291e-3	1.888e-3	
Enhanced s-cone syndrome	Inherited retinal dystrophy	1	1	NR2E3 (2)	0.05263	1.00000	1.162e-3	1.729e-3	
Generalized resistance to thyroid hormone	Inherited retinal dystrophy	1	0	THRB (1)	0.05263	1.00000	1.162e-3	1.729e-3	
Goldmann-favre syndrome	Inherited retinal dystrophy	1	1	NR2E3 (4)	0.05263	1.00000	1.162e-3	1.729e-3	
Inherited retinal dystrophy	Mucopolysaccharidosis type 3C	1	1	HGSNAT (2)	0.05263	1.00000	1.162e-3	1.729e-3	
Inherited retinal dystrophy	Mucopolysaccharidosis type iiic (sanfilippo c)	1	1	HGSNAT (2)	0.05263	1.00000	1.162e-3	1.729e-3	
Inherited retinal dystrophy	Pituitary resistance to thyroid hormone	1	0	THRB (1)	0.05263	1.00000	1.162e-3	1.729e-3	
Inherited retinal dystrophy	Refetoff syndrome	1	0	THRB (1)	0.05263	1.00000	1.162e-3	1.729e-3	
Inherited retinal dystrophy	Retinitis pigmentosa-12, autosomal recessive	1	1	CRB1 (2)	0.05263	1.00000	1.162e-3	1.729e-3	
Inherited retinal dystrophy	Snowflake vitreoretinal degeneration	1	1	KCNJ13 (2)	0.05263	1.00000	1.162e-3	1.729e-3	
Inherited retinal dystrophy	Sulfatidosis, juvenile, austin type	1	0	LOC100130207 (1)	0.05263	1.00000	1.162e-3	1.729e-3	

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Abnormal muscle physiology	Retinal dystrophy	1	0	POC5 (1)	0.05556	1.00000	1.098e-3	1.651e-3	
Axonal neuropathy and neurodevelopmental disorder (digfan syndrome)	Retinal dystrophy	1	0	MORC2 (1)	0.05556	1.00000	1.098e-3	1.651e-3	
Charcot-Marie-Tooth disease axonal type 2Z	Retinal dystrophy	1	1	MORC2 (2)	0.05556	1.00000	1.098e-3	1.651e-3	
Fetal anomalies	Retinal dystrophy	1	0	SCLT1 (1)	0.05556	1.00000	1.098e-3	1.651e-3	
Maternally-inherited diabetes and deafness	Retinal dystrophy	1	0	TRNL1 (1)	0.05556	1.00000	1.098e-3	1.651e-3	
Mucopolysaccharidosis type 3A	Retinal dystrophy	1	1	SGSH (2)	0.05556	1.00000	1.098e-3	1.651e-3	
Mucopolysaccharidosis type iiia (sanfilippo a)	Retinal dystrophy	1	0	SGSH (1)	0.05556	1.00000	1.098e-3	1.651e-3	
Muscle cramps	Retinal dystrophy	1	0	POC5 (1)	0.05556	1.00000	1.098e-3	1.651e-3	
Nephronophthisis 12	Retinal dystrophy	1	1	TTC21B (2)	0.05556	1.00000	1.098e-3	1.651e-3	
Retinal dystrophy	Retinitis pigmentosa with choroidal involvement	1	1	RPE65 (5)	0.05556	1.00000	1.098e-3	1.651e-3	
Retinal dystrophy	Senior-Løken syndrome	1	0	SCLT1 (1)	0.05556	1.00000	1.098e-3	1.651e-3	
Bietti crystalline corneoretinal dystrophy	Choroideremia	1	1	CYP4V2 (7)	0.12500	0.33333	9.682e-4	1.496e-3	
Gouty arthritis	Retinal dystrophy, optic nerve edema, splenomegaly, anhidrosis, and migraine headache syndrome	1	1	ALPK1 (3)	0.06250	1.00000	9.685e-4	1.496e-3	
Retinal dystrophy with or without macular staphyloma	Spondylometaphyseal dysplasia	1	1	CFAP410 (3)	0.06667	1.00000	9.039e-4	1.411e-3	
Nephrosclerosis	Retinal dystrophy, optic nerve edema, splenomegaly, anhidrosis, and migraine headache syndrome	1	1	ALPK1 (4)	0.06667	1.00000	9.039e-4	1.411e-3	
Exudative vitreoretinopathy	Retinal dystrophy with or without extraocular anomalies	1	1	RCBTB1 (2)	0.07692	1.00000	7.748e-4	1.247e-3	256
Corneal ulcer	Retinal dystrophy, optic nerve edema, splenomegaly, anhidrosis, and migraine headache syndrome	1	1	ALPK1 (3)	0.10000	1.00000	5.811e-4	1.000e-3	
Gonadal dysgenesis, dysmorphic facies, retinal dystrophy, and myopathy	Male infertility globozoospermia	1	1	PPP2R3C (2)	0.10000	1.00000	5.811e-4	1.000e-3	
Doyne honeycomb retinal dystrophy	Factor i deficiency	1	1	CFI (3)	0.16667	0.50000	5.165e-4	9.125e-4	
Doyne honeycomb retinal dystrophy	Retinitis pigmentosa, digenic	1	0	PRPH2 (1)	0.16667	0.50000	5.165e-4	9.125e-4	
Exudative retinopathy	Retinal dystrophy with or without extraocular anomalies	1	1	RCBTB1 (2)	0.12500	1.00000	4.520e-4	8.260e-4	256

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Chorioretinal dystrophy, spinocerebellar ataxia, hypogonadotropic hypogonadism syndrome	Mucopolipidosis	1	1	PNPLA6 (2)	0.12500	1.00000	4.520e-4	8.260e-4	76
Mucopolipidosis	Retinal dystrophy-ataxia-pituitary hormone abnormality-hypogonadism syndrome	1	1	PNPLA6 (2)	0.12500	1.00000	4.520e-4	8.260e-4	76
Bothnia retinal dystrophy	Retinitis punctata albescens	1	1	RLBP1 (7)	0.14286	1.00000	3.874e-4	7.329e-4	
Neurodevelopmental delay	Retinal dystrophy, juvenile cataracts, and short stature syndrome	1	0	RDH11 (1)	0.14286	1.00000	3.874e-4	7.329e-4	
Ataxia with oculomotor apraxia	Cerebellar dysplasia with cysts with or without retinal dystrophy	1	1	LAMA1 (4)	0.16667	1.00000	3.228e-4	6.412e-4	564
Coach syndrome	Intellectual development disorder, truncal obesity, retinal dystrophy, and micropenis	1	1	INPP5E (2)	0.16667	1.00000	3.228e-4	6.412e-4	329
Congenital hemivertebra	Intellectual development disorder, truncal obesity, retinal dystrophy, and micropenis	1	1	INPP5E (2)	0.16667	1.00000	3.228e-4	6.412e-4	329
Coach syndrome	Mental retardation, truncal obesity, retinal dystrophy, and micropenis	1	1	INPP5E (3)	0.16667	1.00000	3.228e-4	6.412e-4	329
Congenital hemivertebra	Mental retardation, truncal obesity, retinal dystrophy, and micropenis	1	1	INPP5E (3)	0.16667	1.00000	3.228e-4	6.412e-4	329
Bilateral microphthalmos	Progressive retinal dystrophy due to retinol transport defect	1	1	RBP4 (2)	0.16667	1.00000	3.228e-4	6.412e-4	
Butterfly-shaped pigmentary macular dystrophy	Retinal dystrophy, early-onset, with or without pituitary dysfunction	1	1	OTX2 (3)	0.16667	1.00000	3.228e-4	6.412e-4	415
Bilateral microphthalmos	Retinal dystrophy, iris coloboma, and comedogenic acne syndrome	1	1	RBP4 (2)	0.16667	1.00000	3.228e-4	6.412e-4	
Progressive retinal dystrophy due to retinol transport defect	Vitamin a deficiency	1	1	RBP4 (3)	0.16667	1.00000	3.228e-4	6.412e-4	
Congenital hernia of foramen of bochdalek	Doyme honeycomb retinal dystrophy	1	1	EFEMP1 (7)	0.20000	1.00000	2.583e-4	5.384e-4	103
Cutis laxa, autosomal recessive, type id	Doyme honeycomb retinal dystrophy	1	1	EFEMP1 (7)	0.20000	1.00000	2.583e-4	5.384e-4	103
Doyme honeycomb degeneration of retina	Doyme honeycomb retinal dystrophy	1	1	EFEMP1 (7)	0.20000	1.00000	2.583e-4	5.384e-4	103
Microphthalmia, isolated, with coloboma	Progressive retinal dystrophy due to retinol transport defect	1	1	RBP4 (2)	0.20000	1.00000	2.583e-4	5.384e-4	
Patterned macular dystrophy	Retinal dystrophy, early-onset, with or without pituitary dysfunction	1	1	OTX2 (2)	0.20000	1.00000	2.583e-4	5.384e-4	415
Microphthalmia, isolated, with coloboma	Retinal dystrophy, iris coloboma, and comedogenic acne syndrome	1	0	RBP4 (1)	0.20000	1.00000	2.583e-4	5.384e-4	
X-linked intellectual disability-limb spasticity-retinal dystrophy-diabetes insipidus syndrome	X-linked nonsyndromic hearing loss	1	1	PRPS1 (3)	0.20000	1.00000	2.583e-4	5.384e-4	347
Atrophic retina	Bietti crystalline corneoretinal dystrophy	1	0	ABCA4 (1)	0.25000	1.00000	1.937e-4	4.414e-4	

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Bietti crystalline corneoretinal dystrophy	Fundus flavimaculatus	1	1	ABCA4 (2)	0.25000	1.00000	1.937e-4	4.414e-4	
Bietti crystalline corneoretinal dystrophy	Congenital prekallikrein deficiency	1	1	KLKB1 (3)	0.25000	1.00000	1.937e-4	4.414e-4	566
Bietti crystalline corneoretinal dystrophy	Inherited prekallikrein deficiency	1	1	KLKB1 (2)	0.25000	1.00000	1.937e-4	4.414e-4	566
Bietti crystalline corneoretinal dystrophy	Coagulation disorder	1	1	KLKB1 (2)	0.25000	1.00000	1.937e-4	4.414e-4	566
Bietti crystalline corneoretinal dystrophy	Fletcher factor (prekallikrein) deficiency	1	1	KLKB1 (2)	0.25000	1.00000	1.937e-4	4.414e-4	566
Ataxia with deafness and vision loss	X-linked intellectual disability-limb spasticity-retinal dystrophy-diabetes insipidus syndrome	1	0	PRPS1 (1)	0.33333	1.00000	1.291e-4	3.269e-4	347
Bothnia retinal dystrophy	Fundus albipunctatus	1	1	RLBP1 (7)	0.33333	1.00000	1.291e-4	3.269e-4	
Cerebellar ataxia and hypogonadotropic hypogonadism	Chorioretinal dystrophy, spinocerebellar ataxia, hypogonadotropic hypogonadism syndrome	1	1	PNPLA6 (3)	0.33333	1.00000	1.291e-4	3.269e-4	76
Cerebellar ataxia and hypogonadotropic hypogonadism	Retinal dystrophy-ataxia-pituitary hormone abnormality-hypogonadism syndrome	1	1	PNPLA6 (3)	0.33333	1.00000	1.291e-4	3.269e-4	76
Cerebellar ataxia, intellectual disability, oculomotor apraxia, cerebellar cysts	Cerebellar dysplasia with cysts with or without retinal dystrophy	1	1	LAMA1 (2)	0.33333	1.00000	1.291e-4	3.269e-4	564
Coats disease	Retinal dystrophy with or without extraocular anomalies	1	0	RCBTB1 (1)	0.33333	1.00000	1.291e-4	3.269e-4	256
Congenital hypoplasia of femur	Mental retardation, truncal obesity, retinal dystrophy, and micropenis	1	1	INPP5E (3)	0.33333	1.00000	1.291e-4	3.269e-4	329
Congenital hypoplasia of femur	Intellectual development disorder, truncal obesity, retinal dystrophy, and micropenis	1	1	INPP5E (2)	0.33333	1.00000	1.291e-4	3.269e-4	329
Retinal dystrophy, juvenile cataracts, and short stature syndrome	Retinitis pigmentosa, juvenile cataract, short stature, intellectual disability syndrome	1	1	RDH11 (4)	0.33333	1.00000	1.291e-4	3.269e-4	
Inherited retinal dystrophy	Nanophthalmos	2	2	CRB1 (2), C1QTNF5 (2)	0.06897	0.16667	8.362e-5	2.563e-4	
Abri amyloidosis	Retinal dystrophy with inner retinal dysfunction and ganglion cell abnormalities	1	1	ITM2B (2)	0.50000	1.00000	6.457e-5	1.985e-4	
Acdb5 deficiency	Retinal dystrophy with leukodystrophy	1	0	ACBD5 (1)	0.50000	1.00000	6.457e-5	1.985e-4	
Acyl-coa binding domain containing protein 5 deficiency	Retinal dystrophy with leukodystrophy	1	1	ACBD5 (3)	0.50000	1.00000	6.457e-5	1.985e-4	
Agnathia-holoprosencephaly-situs inversus syndrome	Retinal dystrophy, early-onset, with or without pituitary dysfunction	1	0	OTX2 (1)	0.50000	1.00000	6.457e-5	1.985e-4	415
Arts syndrome	X-linked intellectual disability-limb spasticity-retinal dystrophy-diabetes insipidus syndrome	1	1	PRPS1 (6)	0.50000	1.00000	6.457e-5	1.985e-4	347
Ataxia-hypogonadism-choroidal dystrophy syndrome	Chorioretinal dystrophy, spinocerebellar ataxia, hypogonadotropic hypogonadism syndrome	1	1	PNPLA6 (4)	0.50000	1.00000	6.457e-5	1.985e-4	76

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Ataxia-hypogonadism-choroidal dystrophy syndrome	Retinal dystrophy-ataxia-pituitary hormone abnormality-hypogonadism syndrome	1	1	PNPLA6 (4)	0.50000	1.00000	6.457e-5	1.985e-4	76
Axial spondylometaphyseal dysplasia	Retinal dystrophy with or without macular staphyloma	1	1	CFAP410 (3)	0.50000	1.00000	6.457e-5	1.985e-4	
Boucher-neuhauser syndrome	Chorioretinal dystrophy, spinocerebellar ataxia, hypogonadotropic hypogonadism syndrome	1	1	PNPLA6 (4)	0.50000	1.00000	6.457e-5	1.985e-4	76
Boucher-neuhauser syndrome	Retinal dystrophy-ataxia-pituitary hormone abnormality-hypogonadism syndrome	1	1	PNPLA6 (3)	0.50000	1.00000	6.457e-5	1.985e-4	76
Cerebellar dysplasia with cysts with or without retinal dystrophy	Poretti-boltshauser syndrome	1	0	LAMA1 (1)	0.50000	1.00000	6.457e-5	1.985e-4	564
Chorioretinal dystrophy, spinocerebellar ataxia, hypogonadotropic hypogonadism syndrome	Trichomegaly-retina pigmentary degeneration-dwarfism syndrome	1	1	PNPLA6 (5)	0.50000	1.00000	6.457e-5	1.985e-4	76
Chorioretinal dystrophy, spinocerebellar ataxia, hypogonadotropic hypogonadism syndrome	Retinal dystrophy-ataxia-pituitary hormone abnormality-hypogonadism syndrome	1	1	PNPLA6 (3)	0.50000	1.00000	6.457e-5	1.985e-4	76
Chorioretinal dystrophy, spinocerebellar ataxia, hypogonadotropic hypogonadism syndrome	Spastic paraplegia with or without ataxia	1	1	PNPLA6 (3)	0.50000	1.00000	6.457e-5	1.985e-4	76
Ectopic posterior pituitary	Retinal dystrophy, early-onset, with or without pituitary dysfunction	1	0	OTX2 (1)	0.50000	1.00000	6.457e-5	1.985e-4	415
Familial danish dementia	Retinal dystrophy with inner retinal dysfunction and ganglion cell abnormalities	1	1	ITM2B (2)	0.50000	1.00000	6.457e-5	1.985e-4	
Gonadal dysgenesis, dysmorphic facies, retinal dystrophy, and myopathy	Xy gonadal dysgenesis syndrome	1	1	PPP2R3C (2)	0.50000	1.00000	6.457e-5	1.985e-4	
Intellectual development disorder, truncal obesity, retinal dystrophy, and micropenis	Joubert syndrome 1	1	1	INPP5E (2)	0.50000	1.00000	6.457e-5	1.985e-4	329
Intellectual development disorder, truncal obesity, retinal dystrophy, and micropenis	Mental retardation, truncal obesity, retinal dystrophy, and micropenis	1	1	INPP5E (2)	0.50000	1.00000	6.457e-5	1.985e-4	329
Joubert syndrome 1	Mental retardation, truncal obesity, retinal dystrophy, and micropenis	1	1	INPP5E (2)	0.50000	1.00000	6.457e-5	1.985e-4	329
Chorioretinal dystrophy, spinocerebellar ataxia, hypogonadotropic hypogonadism syndrome	Laurence-moon syndrome	1	1	PNPLA6 (3)	0.50000	1.00000	6.457e-5	1.985e-4	76
Laurence-moon syndrome	Retinal dystrophy-ataxia-pituitary hormone abnormality-hypogonadism syndrome	1	1	PNPLA6 (2)	0.50000	1.00000	6.457e-5	1.985e-4	76
Microphthalmia, isolated, with coloboma 10	Progressive retinal dystrophy due to retinol transport defect	1	1	RBP4 (2)	0.50000	1.00000	6.457e-5	1.985e-4	
Microphthalmia, isolated, with coloboma 10	Retinal dystrophy, iris coloboma, and comedogenic acne syndrome	1	0	RBP4 (1)	0.50000	1.00000	6.457e-5	1.985e-4	
Microphthalmia, syndromic 5	Retinal dystrophy, early-onset, with or without pituitary dysfunction	1	0	OTX2 (1)	0.50000	1.00000	6.457e-5	1.985e-4	415
Microphthalmia/coloboma 10	Progressive retinal dystrophy due to retinol transport defect	1	1	RBP4 (2)	0.50000	1.00000	6.457e-5	1.985e-4	
Microphthalmia/coloboma 10	Retinal dystrophy, iris coloboma, and comedogenic acne syndrome	1	0	RBP4 (1)	0.50000	1.00000	6.457e-5	1.985e-4	

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Chorioretinal dystrophy, spinocerebellar ataxia, hypogonadotropic hypogonadism syndrome	Oliver-mcfarlane syndrome	1	1	PNPLA6 (3)	0.50000	1.00000	6.457e-5	1.985e-4	76
Oliver-mcfarlane syndrome	Retinal dystrophy-ataxia-pituitary hormone abnormality-hypogonadism syndrome	1	1	PNPLA6 (2)	0.50000	1.00000	6.457e-5	1.985e-4	76
Phosphoribosylpyrophosphate synthetase superactivity	X-linked intellectual disability-limb spasticity-retinal dystrophy-diabetes insipidus syndrome	1	1	PRPS1 (5)	0.50000	1.00000	6.457e-5	1.985e-4	347
Progressive retinal dystrophy due to retinol transport defect	Retinal dystrophy, iris coloboma, and comedogenic acne syndrome	1	1	RBP4 (2)	0.50000	1.00000	6.457e-5	1.985e-4	
PRPS1 deficiency disorder	X-linked intellectual disability-limb spasticity-retinal dystrophy-diabetes insipidus syndrome	1	1	PRPS1 (2)	0.50000	1.00000	6.457e-5	1.985e-4	347
Retinal dystrophy-ataxia-pituitary hormone abnormality-hypogonadism syndrome	Trichomegaly-retina pigmentary degeneration-dwarfism syndrome	1	1	PNPLA6 (5)	0.50000	1.00000	6.457e-5	1.985e-4	76
Retinal dystrophy-ataxia-pituitary hormone abnormality-hypogonadism syndrome	Spastic paraplegia with or without ataxia	1	0	PNPLA6 (1)	0.50000	1.00000	6.457e-5	1.985e-4	76
Retinal dystrophy, optic nerve edema, splenomegaly, anhidrosis, and migraine headache syndrome	Rosah syndrome	1	1	ALPK1 (2)	0.50000	1.00000	6.457e-5	1.985e-4	
Chorioretinal dystrophy, spinocerebellar ataxia, hypogonadotropic hypogonadism syndrome	Spastic paraplegia 39, autosomal recessive	1	1	PNPLA6 (3)	0.50000	1.00000	6.457e-5	1.985e-4	76
Retinal dystrophy-ataxia-pituitary hormone abnormality-hypogonadism syndrome	Spastic paraplegia 39, autosomal recessive	1	1	PNPLA6 (2)	0.50000	1.00000	6.457e-5	1.985e-4	76
Dominant retinopathy	Retinal dystrophy	2	2	RPE65 (2), SNRNP200 (2)	0.08696	0.28571	2.374e-5	1.237e-4	
Inherited retinal dystrophy	Night blindness, congenital stationary	3	3	PDE6B (8), GNAT1 (7), SLC24A1 (6)	0.06977	0.16667	3.789e-6	2.145e-5	
Bietti crystalline corneoretinal dystrophy	Hereditary corneal dystrophy	2	1	CYP4V2 (7), KLKB1 (1)	0.14286	0.66667	1.650e-6	9.791e-6	
Atypical hemolytic uremic syndrome	Doyme honeycomb retinal dystrophy	2	2	CFI (3), CFH (4)	0.20000	0.50000	1.050e-6	6.377e-6	
Inherited retinal dystrophy	Oguchi disease	3	3	PDE6B (2), GNAT1 (2), SLC24A1 (2)	0.10000	0.21429	4.760e-7	3.038e-6	
Nystagmus	Retinal dystrophy	4	4	RPGRIP1 (3), RPE65 (3), SCLT1 (2), SGSH (2)	0.06667	0.23529	1.575e-7	1.072e-6	
Doyme honeycomb retinal dystrophy	Thrombotic microangiopathy	2	1	CFI (1), CFH (2)	0.33333	0.66667	1.501e-7	1.022e-6	
Inherited retinal dystrophy	Stargardt disease	4	4	LRAT (2), CRB1 (2), SPATA7 (2), KCNV2 (2)	0.09302	0.22222	2.569e-8	1.922e-7	
Inherited retinal dystrophy	Leber congenital amaurosis	6	6	LRAT (8), PDE6B (2), CRB1 (8), SPATA7 (9), NR2E3 (2), KCNJ13 (8)	0.06977	0.33333	1.578e-10	1.454e-9	
Cone-rod dystrophy	Retinal dystrophy	6	6	RPGRIP1 (7), RPE65 (2), CLN3 (2), SCLT1 (2), ARL6 (2), GUCA1B (2)	0.06818	0.35294	1.354e-10	1.253e-9	