

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: 2026-10-09 03:00:13. Filters applied: disease name contains "Polymicrogyria" (54 matching pairs). · Rows: 54 · Generated: 2026-10-09 00:57:45

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Perisylvian syndrome	Polymicrogyria	6	5	CCND2 (2), PI4KA (2), ADGRG1 (3), SRPX2 (2), TUBB2B (2), SCN3A (1)	0.20000	0.60000	2.002e-15	2.945e-14	
Bilateral perisylvian polymicrogyria	Perisylvian syndrome	3	3	PI4KA (2), ADGRG1 (2), SRPX2 (2)	0.27273	1.00000	1.973e-10	1.915e-9	
Cortical development malformation	Polymicrogyria	5	4	DHX37 (1), DYNC1H1 (2), AKT3 (2), WDR62 (2), TUBB2B (3)	0.10417	0.20000	5.810e-10	5.375e-9	
Bilateral perisylvian polymicrogyria	Polymicrogyria	3	3	PI4KA (3), ADGRG1 (4), SRPX2 (2)	0.11538	1.00000	3.781e-9	3.218e-8	
Cortical dysplasia with other brain malformations	Polymicrogyria	3	3	DYNC1H1 (3), ADGRG1 (4), TUBB2B (4)	0.07500	0.17647	2.533e-6	1.384e-5	
amyotrophic lateral sclerosis type 11	Bilateral parasagittal parieto-occipital polymicrogyria	1	1	FIG4 (5)	0.50000	1.00000	6.494e-5	2.329e-4	105
fetal akinesia, respiratory insufficiency, microcephaly, polymicrogyria, and dysmorphic facies	hemiplegic migraine-developmental and epileptic encephalopathy spectrum	1	0	ATP1A2 (1)	0.50000	1.00000	6.494e-5	2.329e-4	
Penile hypospadias	Polymicrogyria	2	1	FIG4 (3), PEX1 (1)	0.06250	0.25000	7.044e-5	2.520e-4	
Bilateral parasagittal parieto-occipital polymicrogyria	Yunis-varon syndrome	1	1	FIG4 (7)	0.33333	1.00000	1.299e-4	3.929e-4	105
Ck syndrome	Perisylvian polymicrogyria	1	1	NSDHL (7)	0.33333	1.00000	1.299e-4	3.929e-4	381
Congenital hemidysplasia with ichthyosiform erythroderma and limb defects	Perisylvian polymicrogyria	1	1	NSDHL (3)	0.33333	1.00000	1.299e-4	3.929e-4	381
Alternating hemiplegia of childhood	fetal akinesia, respiratory insufficiency, microcephaly, polymicrogyria, and dysmorphic facies	1	1	ATP1A2 (3)	0.33333	1.00000	1.299e-4	3.929e-4	
Bilateral generalized polymicrogyria	microcephalic primordial dwarfism due to RTTN deficiency	1	1	RTTN (3)	0.33333	1.00000	1.299e-4	3.929e-4	
Bilateral frontoparietal polymicrogyria	Bilateral perisylvian polymicrogyria	1	1	ADGRG1 (4)	0.25000	1.00000	1.948e-4	5.350e-4	264
Benign neonatal epilepsy	fetal akinesia, respiratory insufficiency, microcephaly, polymicrogyria, and dysmorphic facies	1	1	ATP1A2 (2)	0.20000	1.00000	2.598e-4	6.505e-4	
Bilateral parasagittal parieto-occipital polymicrogyria	Micropenis	1	1	FIG4 (4)	0.20000	1.00000	2.598e-4	6.505e-4	105
Dysphasia	fetal akinesia, respiratory insufficiency, microcephaly, polymicrogyria, and dysmorphic facies	1	1	ATP1A2 (2)	0.20000	1.00000	2.598e-4	6.505e-4	
fetal akinesia, respiratory insufficiency, microcephaly, polymicrogyria, and dysmorphic facies	Hemiplegic migraine	1	1	ATP1A2 (3)	0.16667	1.00000	3.247e-4	7.705e-4	

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Bilateral perisylvian polymicrogyria	Combined immunodeficiency-multiple intestinal atresia	1	0	PI4KA (1)	0.20000	0.50000	3.896e-4	8.660e-4	264
Bilateral parasagittal parieto-occipital polymicrogyria	Penile hypospadias	1	1	FIG4 (4)	0.11111	1.00000	5.195e-4	1.060e-3	105
Bilateral perisylvian polymicrogyria	Heparin cofactor 2 deficiency	1	1	PI4KA (2)	0.16667	0.33333	5.844e-4	1.156e-3	264
Bilateral perisylvian polymicrogyria	Combined immunodeficiency, enteropathy spectrum	1	1	PI4KA (2)	0.16667	0.33333	5.844e-4	1.156e-3	264
Bilateral perisylvian polymicrogyria	Gastrointestinal defects and immunodeficiency syndrome	1	1	PI4KA (4)	0.16667	0.33333	5.844e-4	1.156e-3	264
Arachnodactyly	Perisylvian polymicrogyria	1	0	NSDHL (1)	0.14286	0.50000	6.494e-4	1.241e-3	381
megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 3	Perisylvian syndrome	1	1	CCND2 (3)	0.09091	1.00000	6.494e-4	1.241e-3	
Bilateral frontoparietal polymicrogyria	Perisylvian syndrome	1	1	ADGRG1 (5)	0.09091	1.00000	6.494e-4	1.241e-3	
Bilateral generalized polymicrogyria	Hemimegalencephaly	1	1	GRIN1 (2)	0.11111	0.50000	9.090e-4	1.575e-3	
Bilateral frontoparietal polymicrogyria	Cortical dysplasia with other brain malformations	1	1	ADGRG1 (5)	0.05556	1.00000	1.104e-3	1.826e-3	
Bilateral generalized polymicrogyria	Laryngeal carcinoma	1	1	RTTN (3)	0.08333	0.50000	1.298e-3	2.062e-3	
Bilateral frontoparietal polymicrogyria	Intracerebral hemorrhage	1	1	ADGRG1 (5)	0.04545	1.00000	1.364e-3	2.147e-3	
Bilateral generalized polymicrogyria	Trigeminal neuralgia	1	1	GRIN1 (3)	0.07143	0.50000	1.558e-3	2.376e-3	
microcephaly 2, primary, autosomal recessive, with or without cortical malformations	Polymicrogyria	1	1	WDR62 (2)	0.03846	1.00000	1.624e-3	2.460e-3	
megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 3	Polymicrogyria	1	1	CCND2 (2)	0.03846	1.00000	1.624e-3	2.460e-3	
Congenital hemidysplasia with ichthyosiform erythroderma and limb defects	Polymicrogyria	1	1	NSDHL (3)	0.03846	1.00000	1.624e-3	2.460e-3	
LAMA5-related multisystemic syndrome	Polymicrogyria	1	1	LAMA5 (2)	0.03846	1.00000	1.624e-3	2.460e-3	
LAMA2-related muscular dystrophy	Polymicrogyria	1	1	LAMA2 (2)	0.03846	1.00000	1.624e-3	2.460e-3	
amyotrophic lateral sclerosis type 11	Polymicrogyria	1	1	FIG4 (4)	0.03846	1.00000	1.624e-3	2.460e-3	
Anomalous pulmonary venous	Polymicrogyria	1	0	PSMC3 (1)	0.03846	1.00000	1.624e-3	2.460e-3	
Deafness with cataract, intellectual disability, and polyneuropathy	Polymicrogyria	1	1	PSMC3 (4)	0.03846	1.00000	1.624e-3	2.460e-3	

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Congenital merosin-deficient muscular dystrophy	Polymicrogyria	1	1	LAMA2 (2)	0.03846	1.00000	1.624e-3	2.460e-3	
Complex partial epilepsy	Polymicrogyria	1	1	SCN3A (2)	0.03846	1.00000	1.624e-3	2.460e-3	
Ck syndrome	Polymicrogyria	1	1	NSDHL (7)	0.03846	1.00000	1.624e-3	2.460e-3	
Bilateral parasagittal parieto-occipital polymicrogyria	Polymicrogyria	1	1	FIG4 (6)	0.03846	1.00000	1.624e-3	2.460e-3	
Bilateral frontoparietal polymicrogyria	Polymicrogyria	1	1	ADGRG1 (6)	0.03846	1.00000	1.624e-3	2.460e-3	
Byzanthine arch palate	Perisylvian polymicrogyria	1	0	NSDHL (1)	0.06667	0.50000	1.688e-3	2.530e-3	381
Hydrocephalus	megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 3	1	1	CCND2 (3)	0.03704	1.00000	1.689e-3	2.530e-3	
Perisylvian polymicrogyria	Seckel syndrome	1	1	CPAP (6)	0.05000	0.50000	2.337e-3	3.242e-3	
megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 3	Polydactyly	1	1	CCND2 (3)	0.02500	1.00000	2.533e-3	3.445e-3	
megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 3	Neoplasms	1	1	CCND2 (2)	0.02083	1.00000	3.052e-3	4.024e-3	
Polymicrogyria	Skraban-deardorff syndrome	1	0	WDR62 (1)	0.03704	0.50000	3.245e-3	4.243e-3	
Bilateral generalized polymicrogyria	Congenital microcephaly	1	1	RTTN (2)	0.03030	0.50000	4.023e-3	5.084e-3	
Intellectual developmental disorder dysmorphic facial	Polymicrogyria	1	1	SETD5 (3)	0.03571	0.33333	4.863e-3	5.985e-3	
Intellectual developmental disorder seizures polymicrogyria	Prostatic neoplasms	1	1	TCP1 (4)	0.00159	1.00000	4.072e-2	4.256e-2	21
Intellectual developmental disorder seizures polymicrogyria	Neurodevelopmental disorder	1	1	TCP1 (4)	0.00106	1.00000	6.092e-2	6.246e-2	