

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: 2026-10-12 03:00:13. Filters applied: disease name contains "Myotonia congenita" (11 matching pairs). · Rows: 11 · Generated: 2026-10-12 11:40:15

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Male reproductive organ cancer	Paramyotonia congenita	1	1	SCN4A (5)	0.05263	0.50000	2.207e-3	3.113e-3	163
Metachromatic leukodystrophy	Myotonia congenita	1	1	CLCN1 (3)	0.11111	1.00000	5.195e-4	1.061e-3	
Myotonia congenita	Smith-lemli-opitz syndrome	1	1	CLCN1 (3)	0.20000	1.00000	2.598e-4	6.509e-4	
Hyperkalemic periodic paralysis	Myotonia congenita	1	1	CLCN1 (3)	0.25000	1.00000	1.948e-4	5.354e-4	
Becker generalized myotonia	Myotonia congenita	1	1	CLCN1 (3)	0.33333	1.00000	1.299e-4	3.931e-4	
familial acute necrotizing encephalopathy	Paramyotonia congenita	1	1	RANBP2 (2)	0.33333	1.00000	1.299e-4	3.931e-4	163
Myotonia	Paramyotonia congenita	1	1	SCN4A (5)	0.33333	1.00000	1.299e-4	3.931e-4	163
Paramyotonia congenita	Potassium-aggravated myotonia	1	1	SCN4A (5)	0.33333	1.00000	1.299e-4	3.931e-4	163
Paramyotonia congenita	SCN4A-related myopathy, autosomal recessive	1	1	SCN4A (6)	0.33333	1.00000	1.299e-4	3.931e-4	163
Congenital myotonia	Myotonia congenita	1	1	CLCN1 (3)	0.50000	1.00000	6.494e-5	2.331e-4	
Hyperkalemic periodic paralysis	Paramyotonia congenita	2	1	SCN4A (5), RANBP2 (1)	0.50000	1.00000	2.531e-8	1.927e-7	163