

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: 2026-10-11 03:00:14. Filters applied: disease name contains "Maple syrup urine disease" (9 matching pairs). · Rows: 9 · Generated: 2026-10-11 14:06:44

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Maple syrup urine disease	Thiamine-responsive maple syrup urine disease	3	3	BCKDHB (7), BCKDHA (8), DBT (7)	0.37500	1.00000	5.753e-11	5.858e-10	
Autism-epilepsy syndrome	Maple syrup urine disease	1	1	BCKDK (2)	0.12500	1.00000	4.546e-4	9.726e-4	
Branched-chain keto acid dehydrogenase kinase deficiency	Maple syrup urine disease	1	1	BCKDK (5)	0.12500	1.00000	4.546e-4	9.726e-4	
Hypervalinemia	Maple syrup urine disease	1	1	BCAT2 (6)	0.12500	1.00000	4.546e-4	9.726e-4	
Maple syrup urine disease	pyruvate dehydrogenase E3 deficiency	1	1	DLD (2)	0.12500	1.00000	4.546e-4	9.726e-4	
Amblyopia	Thiamine-responsive maple syrup urine disease	1	1	BCKDHB (2)	0.03571	0.33333	4.863e-3	5.987e-3	
Nonalcoholic fatty liver disease	Thiamine-responsive maple syrup urine disease	1	1	BCKDHB (2)	0.00313	0.33333	6.032e-2	6.203e-2	
Androgenetic alopecia	Thiamine-responsive maple syrup urine disease	1	1	BCKDHA (2)	0.00243	0.33333	7.741e-2	7.870e-2	
Intellectual developmental disorder	Thiamine-responsive maple syrup urine disease	1	1	BCKDHA (2)	0.00123	0.33333	1.495e-1	1.505e-1	