

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 "2-methylbutyryl-coa dehydrogenase deficiency" (4 matching pairs). · Rows: 4 · Generated: 2026-10-10 15:10:26

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
2-methylbutyryl-coa dehydrogenase deficiency	Rheumatic disease	1	1	ACADSB (5)	0.07143	1.00000	8.443e-4	1.499e-3	
2-methylbutyryl-coa dehydrogenase deficiency	Lewy body disease	1	1	ACADSB (5)	0.01042	1.00000	6.170e-3	7.415e-3	
2-methylbutyryl-coa dehydrogenase deficiency	Periodontitis	1	1	ACADSB (5)	0.00629	1.00000	1.026e-2	1.160e-2	
2-methylbutyryl-coa dehydrogenase deficiency	Autism	1	1	ACADSB (5)	0.00068	1.00000	9.501e-2	9.603e-2	