

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 "Lewy body disease" (15 matching pairs). · Rows: 15 · Generated: 2026-10-11 14:49:37

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Lewy body disease	Parkinson disease	34	21	KANSL1 (1), INS (2), MCCC1 (1), GFAP (2), APOE (1), ELOVL7 (1), IGF2 (2), KRTCAP2 (1), NTRK2 (3), PTPRD (1), IGF1R (2), IGF2R (2)	0.05753	0.35789	5.808e-26	1.480e-24	
Brain infarction	Lewy body disease	12	0	APOE (1), CDKAL1 (1), KAZN (1), PTPRD (1), SGK1 (1), HS3ST4 (1), ATP10A (1), POLD3 (1), ABTB2 (1), KCNB2 (1), RAG1 (1), SLC29A4 (1)	0.10000	0.33333	1.643e-18	2.901e-17	
Cerebral amyloid angiopathy	Lewy body disease	13	1	APOC1 (1), APOE (3), CDKAL1 (1), KAZN (1), PTPRD (1), SGK1 (1), HS3ST4 (1), ATP10A (1), POLD3 (1), ABTB2 (1), KCNB2 (1), RAG1 (1)	0.08442	0.18310	3.478e-16	5.374e-15	
Atherosclerosis	Lewy body disease	9	8	APOC1 (1), APOE (3), CLU (2), IGF2 (2), AGER (2), SOD2 (2), NOS2 (2), EDN1 (2), HRH1 (3)	0.04369	0.09474	4.878e-8	3.626e-7	
Hyperkinesia	Lewy body disease	5	5	NTRK2 (2), NGF (2), NTS (3), TH (2), SNCG (2)	0.04032	0.15152	1.664e-6	9.432e-6	
Cystic fibrosis-related diabetes	Lewy body disease	2	0	RAB7B (1), SLC26A9 (1)	0.02062	0.66667	1.125e-4	3.931e-4	
2-methylbutyryl-coa dehydrogenase deficiency	Lewy body disease	1	1	ACADSB (5)	0.01042	1.00000	6.170e-3	7.415e-3	
Deafness and myopia	Lewy body disease	1	1	SLITRK6 (4)	0.01042	1.00000	6.170e-3	7.415e-3	
HAVCR2-related cancer predisposition	Lewy body disease	1	1	HAVCR2 (2)	0.01042	1.00000	6.170e-3	7.415e-3	
hereditary sensory and autonomic neuropathy type 4	Lewy body disease	1	1	NTRK1 (3)	0.01042	1.00000	6.170e-3	7.415e-3	
hermansky-pudlak syndrome 5	Lewy body disease	1	1	HPS5 (2)	0.01042	1.00000	6.170e-3	7.415e-3	
high myopia-sensorineural deafness syndrome	Lewy body disease	1	1	SLITRK6 (2)	0.01042	1.00000	6.170e-3	7.415e-3	
Hypochromic sideroblastic anemia	Lewy body disease	1	1	STEAP3 (6)	0.01042	1.00000	6.170e-3	7.415e-3	
immunodeficiency 122	Lewy body disease	1	1	POLD3 (2)	0.01042	1.00000	6.170e-3	7.415e-3	
3-methylcrotonyl-coa carboxylase deficiency	Lewy body disease	1	1	MCCC1 (5)	0.01031	0.50000	1.230e-2	1.377e-2	