

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 "Brain infarction" (13 matching pairs). · Rows: 13 · Generated: 2026-10-10 13:32:17

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Brain infarction	Cerebral amyloid angiopathy	12	1	APOE (3), CDKAL1 (1), KAZN (1), PTPRD (1), SGK1 (1), HS3ST4 (1), ATP10A (1), POLD3 (1), ABTB2 (1), KCNB2 (1), RAG1 (1), SLC29A4 (1)	0.12500	0.33333	3.985e-20	7.652e-19	
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	
Brain infarction	Proteinuria	4	4	APOE (2), HLA-DQA1 (2), CYBB (2), ALOX5AP (2)	0.05333	0.11111	2.643e-6	1.443e-5	
Brain infarction	Obstructive sleep apnea syndrome	4	0	APOE (1), SLC35F3 (1), HS3ST4 (1), ATP10A (1)	0.03509	0.11111	3.682e-5	1.686e-4	
Brain infarction	Ventricular dysfunction	3	3	ALDH2 (2), PLAT (2), SIRT1 (2)	0.03750	0.08333	1.663e-4	5.008e-4	
Brain infarction	Hemophilia a	2	1	HLA-DQA1 (1), PLAT (2)	0.03922	0.12500	6.247e-4	1.235e-3	
Brain infarction	Cerebral arterial disease	1	0	ADGRE3 (1)	0.02703	1.00000	2.338e-3	3.243e-3	
Brain infarction	immunodeficiency 122	1	1	POLD3 (2)	0.02703	1.00000	2.338e-3	3.243e-3	
Brain infarction	leukoencephalopathy with vanishing white matter 3	1	1	EIF2B3 (2)	0.02703	1.00000	2.338e-3	3.243e-3	
Brain infarction	neuroblastoma, susceptibility to, 3	1	1	ALK (2)	0.02703	1.00000	2.338e-3	3.243e-3	
Brain infarction	recombinase activating gene 1 deficiency	1	1	RAG1 (2)	0.02703	1.00000	2.338e-3	3.243e-3	
Brain infarction	Trichomegaly	1	1	FGF5 (5)	0.02703	1.00000	2.338e-3	3.243e-3	
Brain infarction	Cerebral artery occlusion	1	0	ADGRE3 (1)	0.02564	0.33333	6.998e-3	8.284e-3	