

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 "Biliary cirrhosis" (10 matching pairs). · Rows: 10 · Generated: 2026-10-11 12:29:27

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Biliary cholangitis	Biliary cirrhosis	128	16	SH2B3 (1), POU2AF1 (3), DDX6 (1), DEAF1 (1), DGKQ (1), ELMO1 (1), ETS1 (1), HLA-DQA1 (1), HLA-DRA (1), ITGB8 (1), MAC1R (1), RARB (1)	0.86486	1.00000	2.436e-297	2.535e-294	
Biliary cirrhosis	Liver cirrhosis	46	43	HLA-DQA1 (1), NOS3 (2), NFE2L2 (2), RELA (2), HLA-DQB1 (2), VDR (1), ALB (2), HIF1A (2), ATG5 (3), TGFB1 (2), HLA-DPB1 (1), CLEC16A (3)	0.13256	0.35938	4.558e-49	2.337e-47	
Biliary cirrhosis	Sclerosing cholangitis	30	9	SH2B3 (1), ETS1 (1), HLA-DQA1 (2), HLA-DRA (1), ATXN2 (1), HLA-DQB1 (1), ATG5 (1), CCR6 (1), CCL20 (1), CD226 (1), CEP43 (1), CLEC16A (2)	0.09119	0.23438	1.068e-27	2.992e-26	
Biliary cirrhosis	Systemic sclerosis	19	8	DDX6 (1), DGKQ (1), ELMO1 (1), HLA-DQA1 (2), HLA-DRA (1), HLA-DQB1 (2), ATG5 (1), HLA-DPB1 (1), CCR6 (2), IL12RB2 (1), IRF5 (2), NFKB1 (2)	0.07983	0.14844	7.773e-19	1.393e-17	
Biliary cirrhosis	Sjogren syndrome	15	7	DGKQ (3), HLA-DQA1 (2), HLA-DRA (1), ATXN2 (1), HLA-DQB1 (2), ATG5 (1), HLA-DPB1 (1), CTLA4 (2), IRF5 (1), STAT4 (3), TNPO3 (1), CXCR5 (2)	0.08108	0.21127	1.666e-17	2.801e-16	
Biliary cirrhosis	Childhood-onset sensorineural hearing impairment	1	1	PRORP (2)	0.00775	1.00000	8.313e-3	9.631e-3	
Biliary cirrhosis	Cranioosteoarthropathy	1	1	HPGD (4)	0.00775	1.00000	8.313e-3	9.631e-3	
Biliary cirrhosis	Digital clubbing, isolated congenital	1	1	HPGD (2)	0.00775	1.00000	8.313e-3	9.631e-3	
Biliary cirrhosis	immunodeficiency 19	1	1	CD3D (2)	0.00775	1.00000	8.313e-3	9.631e-3	
Biliary cirrhosis	Inner ear disease	1	0	CENPB (1)	0.00775	1.00000	8.313e-3	9.631e-3	