

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: 2026-10-08 03:00:13. Filters applied: disease name contains "Bone osteosarcoma" (10 matching pairs). · Rows: 10 · Generated: 2026-10-08 11:32:13

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Bone osteosarcoma	Osteogenic sarcoma	2	2	CHEK2 (2), RB1 (2)	0.50000	1.00000	2.531e-8	1.932e-7	
Bone osteosarcoma	Osteosarcoma	3	3	CHEK2 (3), TP53 (3), RB1 (3)	0.05172	1.00000	4.810e-8	3.586e-7	
Bone osteosarcoma	Li-fraumeni syndrome	2	2	CHEK2 (5), TP53 (7)	0.28571	0.66667	2.530e-7	1.658e-6	
Bone osteosarcoma	Small cell carcinoma	2	2	TP53 (2), RB1 (2)	0.18182	0.66667	9.108e-7	5.383e-6	
Bone osteosarcoma	Hereditary breast and ovarian cancer syndrome	2	2	CHEK2 (2), TP53 (2)	0.11765	0.66667	2.656e-6	1.449e-5	
Bone osteosarcoma	CHEK2-related cancer predisposition	1	1	CHEK2 (2)	0.25000	1.00000	1.948e-4	5.325e-4	
Adrenocortical carcinoma	Bone osteosarcoma	1	1	TP53 (2)	0.25000	1.00000	1.948e-4	5.325e-4	
Bone osteosarcoma	Choroid plexus carcinoma	1	1	TP53 (3)	0.25000	1.00000	1.948e-4	5.325e-4	
Bone osteosarcoma	Retinoblastoma	1	1	RB1 (5)	0.25000	1.00000	1.948e-4	5.325e-4	
Bone osteosarcoma	Woolly hair	1	1	RB1 (2)	0.11111	0.33333	1.169e-3	1.894e-3	