

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 "Bone neoplasms" (7 matching pairs). · Rows: 7 · Generated: 2026-10-10 19:08:46

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Bone neoplasms	Machado-joseph disease	1	0	THSD7B (1)	0.03448	0.12500	1.086e-2	1.224e-2	
Bone neoplasms	Ruptured abdominal aortic aneurysm	2	2	MMP9 (2), TGFB2 (2)	0.07143	0.25000	4.936e-5	2.232e-4	
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Aortic rupture	Bone neoplasms	2	2	MMP9 (2), MMP2 (2)	0.08000	0.40000	1.767e-5	8.438e-5	
Bone neoplasms	Oral submucous fibrosis	3	3	PTGS2 (2), MMP9 (2), MMP2 (2)	0.07692	0.15000	2.455e-6	1.343e-5	
Bone neoplasms	Carotid artery disease	4	4	PLAU (2), MMP9 (2), MMP2 (2), LTA (2)	0.05479	0.19048	8.333e-7	4.951e-6	
Bone neoplasms	Connective tissue neoplasm	5	0	LRP1B (1), KIF13A (1), THSD7B (1), C10orf143 (1), USP20 (1)	0.20000	0.62500	1.577e-13	2.021e-12	