

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 "Cockayne syndrome" (25 matching pairs). · Rows: 25 · Generated: 2026-10-11 10:29:56

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Xeroderma pigmentosum	Xeroderma pigmentosum-cockayne syndrome	5	4	ERCC2 (7), ERCC4 (7), BIVM-ERCC5 (1), ERCC5 (7), ERCC3 (7)	0.38462	1.00000	1.099e-16	1.759e-15	86
Cockayne syndrome	Uv-sensitive syndrome	4	2	ERCC8 (8), NDUFAF2 (1), ERCC6 (7), PGBD3 (1)	0.50000	0.80000	3.203e-14	4.301e-13	
Junctional epidermolysis bullosa	Weber-cockayne syndrome	4	1	KRT5 (1), ITGB4 (6), GALK1 (1), KRT14 (1)	0.21053	1.00000	1.307e-12	1.566e-11	
Cerebrooculofacioskeletal syndrome	Xeroderma pigmentosum-cockayne syndrome	3	2	ERCC2 (6), BIVM-ERCC5 (1), ERCC5 (6)	0.33333	0.60000	3.287e-10	3.122e-9	86
Cerebrooculofacioskeletal syndrome	Cockayne syndrome	3	2	ERCC1 (5), ERCC6 (7), PGBD3 (1)	0.30000	0.50000	6.572e-10	6.039e-9	
Epidermolysis bullosa	Weber-cockayne syndrome	3	3	KRT5 (7), ITGB4 (5), KRT14 (7)	0.13043	0.75000	8.737e-9	7.043e-8	
Cockayne syndrome	De sanctis-cacchione syndrome	2	1	ERCC6 (7), PGBD3 (1)	0.28571	1.00000	1.265e-7	8.712e-7	
Galactokinase deficiency	Weber-cockayne syndrome	2	1	ITGB4 (1), GALK1 (3)	0.28571	0.50000	3.036e-7	1.951e-6	
Cockayne syndrome	Testicular neoplasms	2	2	ERCC1 (3), ERCC4 (3)	0.16667	0.33333	2.655e-6	1.444e-5	
Trichothiodystrophy	Xeroderma pigmentosum-cockayne syndrome	2	2	ERCC2 (5), ERCC3 (7)	0.13333	0.40000	4.634e-6	2.417e-5	86
Cockayne syndrome	Xeroderma pigmentosum	2	2	ERCC1 (3), ERCC4 (7)	0.11765	0.33333	8.337e-6	4.163e-5	
Dysarthria	Xeroderma pigmentosum-cockayne syndrome	2	1	BIVM-ERCC5 (1), ERCC5 (3)	0.07692	0.40000	1.944e-5	9.227e-5	
Salivary gland neoplasms	Weber-cockayne syndrome	2	2	KRT5 (2), ITGB4 (2)	0.04255	0.50000	4.771e-5	2.161e-4	
Epidermolysis bullosa simplex	Weber-cockayne syndrome	1	1	KRT14 (2)	0.20000	1.00000	2.598e-4	6.509e-4	269
Dermatopathia pigmentosa reticularis	Weber-cockayne syndrome	1	1	KRT14 (6)	0.20000	1.00000	2.598e-4	6.509e-4	269
xeroderma pigmentosum group B	Xeroderma pigmentosum-cockayne syndrome	1	1	ERCC3 (4)	0.16667	1.00000	3.247e-4	7.709e-4	86
xeroderma pigmentosum group D	Xeroderma pigmentosum-cockayne syndrome	1	1	ERCC2 (3)	0.16667	1.00000	3.247e-4	7.709e-4	86
xeroderma pigmentosum group F	Xeroderma pigmentosum-cockayne syndrome	1	1	ERCC4 (3)	0.16667	1.00000	3.247e-4	7.709e-4	

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
xeroderma pigmentosum group G	Xeroderma pigmentosum-cockayne syndrome	1	1	ERCC5 (4)	0.16667	1.00000	3.247e-4	7.709e-4	86
Cockayne syndrome	xeroderma pigmentosum group F	1	1	ERCC4 (3)	0.14286	1.00000	3.897e-4	8.665e-4	
Sjogren-larsson syndrome	Weber-cockayne syndrome	1	0	KRT14 (1)	0.16667	0.50000	5.195e-4	1.061e-3	269
Xeroderma pigmentosum-cockayne syndrome	Xfe progeroid syndrome	1	1	ERCC4 (6)	0.14286	0.50000	6.494e-4	1.241e-3	
Cockayne syndrome	Xfe progeroid syndrome	1	1	ERCC4 (6)	0.12500	0.50000	7.792e-4	1.405e-3	
Cholestasis	Cockayne syndrome	1	1	ERCC1 (2)	0.11111	0.33333	1.169e-3	1.895e-3	
Dowling degos disease	Weber-cockayne syndrome	1	1	KRT5 (6)	0.11111	0.25000	1.298e-3	2.063e-3	