

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 "Toxic nodular goiter" (17 matching pairs). · Rows: 17 · Generated: 2026-10-11 14:25:59

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Multinodular goiter	Toxic nodular goiter	10	0	NFIA (1), BCAS3 (1), INSR (1), TG (1), FAM227B (1), ITPK1 (1), PRDM11 (1), MBIP (1), FGF7 (1), MICOS10 (1)	0.27778	0.58824	1.230e-24	2.934e-23	
Hyperthyroidism	Toxic nodular goiter	7	0	NFIA (1), NRG1 (1), TG (1), FAM227B (1), PRDM11 (1), FGF7 (1), MICOS10 (1)	0.10938	0.41176	7.181e-14	9.388e-13	
Thyroid cancer	Toxic nodular goiter	6	1	TERT (1), NRG1 (1), TG (2), SLK (1), STN1 (1), MBIP (1)	0.13043	0.35294	8.847e-13	1.073e-11	
Differentiated thyroid carcinoma	Toxic nodular goiter	6	1	NFIA (1), TERT (2), NRG1 (1), SLK (1), STN1 (1), MBIP (1)	0.09836	0.35294	9.114e-12	1.004e-10	
Thyroid disease	Toxic nodular goiter	5	0	NFIA (1), INSR (1), TG (1), FAM227B (1), MICOS10 (1)	0.07576	0.29412	2.388e-9	2.076e-8	
Clear cell renal cell carcinoma	Toxic nodular goiter	4	0	TERT (1), INSR (1), SLK (1), STN1 (1)	0.05797	0.23529	3.349e-7	2.146e-6	
Benign prostatic hyperplasia	Toxic nodular goiter	3	0	TERT (1), SLK (1), STN1 (1)	0.06000	0.17647	7.158e-6	3.616e-5	
Toxic nodular goiter	Uterine polyp	2	0	NFIA (1), TERT (1)	0.05000	0.11765	3.122e-4	7.709e-4	
Esophageal atresia	Toxic nodular goiter	2	2	TERT (2), INSR (2)	0.04167	0.11765	5.581e-4	1.138e-3	
Hengel maroofian schols syndrome	Toxic nodular goiter	1	1	BCAS3 (4)	0.05556	1.00000	1.104e-3	1.826e-3	
Donohue syndrome	Toxic nodular goiter	1	1	INSR (7)	0.05556	1.00000	1.104e-3	1.826e-3	
Insulin-resistant diabetes mellitus with acanthosis nigricans	Toxic nodular goiter	1	1	INSR (4)	0.05556	1.00000	1.104e-3	1.826e-3	
Chromosome 1p32-p31 deletion syndrome	Toxic nodular goiter	1	1	NFIA (2)	0.05556	1.00000	1.104e-3	1.826e-3	
Toxic nodular goiter	Type a insulin resistance syndrome	1	1	INSR (3)	0.05556	1.00000	1.104e-3	1.826e-3	
1p31p32 microdeletion syndrome	Toxic nodular goiter	1	1	NFIA (3)	0.05556	1.00000	1.104e-3	1.826e-3	
Coats plus syndrome	Toxic nodular goiter	1	1	STN1 (2)	0.05263	0.50000	2.207e-3	3.113e-3	
Brain malformations	Toxic nodular goiter	1	1	NFIA (6)	0.05000	0.33333	3.309e-3	4.310e-3	