

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 "Oocyte maturation defect" (6 matching pairs). · Rows: 6 · Generated: 2026-10-10 17:26:24

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Female infertility	Oocyte maturation defect	11	11	TRIP13 (4), PANX1 (4), ZFP36L2 (5), BTG4 (4), PATL2 (5), TLE6 (4), TUBB8 (6), WEE2 (4), ZP1 (6), ZP2 (6), ZP3 (6)	0.09322	0.44000	2.858e-18	5.008e-17	
amyotrophic lateral sclerosis type 22	Oocyte maturation defect	1	1	TUBA4A (2)	0.03846	1.00000	1.624e-3	2.461e-3	
autosomal dominant macrothrombocytopenia	Oocyte maturation defect	1	1	TUBA4A (2)	0.03846	1.00000	1.624e-3	2.461e-3	
Oocyte maturation defect	Partial corpus callosum agenesis	1	1	KPNA7 (5)	0.03846	1.00000	1.624e-3	2.461e-3	
Male infertility testicular dysgenesis	Oocyte maturation defect	1	1	CHEK1 (3)	0.03571	0.33333	4.863e-3	5.987e-3	
Aplasia cutis congenita with epibulbar dermoids	Oocyte maturation defect	1	1	NLRP5 (4)	0.03571	0.33333	4.863e-3	5.987e-3	