

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 "Psoriatic arthritis" (12 matching pairs). · Rows: 12 · Generated: 2026-10-10 17:48:35

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Psoriasis vulgaris	Psoriatic arthritis	15	4	IFIH1 (1), HLA-C (2), TNIP1 (1), RUNX3 (1), TRAF3IP2 (3), FAP (1), HLA-B (1), IL23R (1), MUC22 (1), NOS2 (3), TNFAIP3 (1), TYK2 (1)	0.13274	0.27778	2.225e-23	4.964e-22	
Psoriatic arthritis	Sarcoidosis	17	6	HLA-C (2), HLA-DQA1 (1), TNXB (1), TAP2 (1), TNF (2), HLA-DQB1 (2), C1orf141 (1), HLA-B (2), IL23R (2), TYK2 (1), NOTCH4 (1), CCR2 (1)	0.07727	0.23288	1.194e-18	2.119e-17	
Graves disease	Psoriatic arthritis	14	12	IFIH1 (3), HLA-DQA1 (2), TNF (2), HLA-DQB1 (2), CYP1A1 (1), HLA-B (2), IL17A (2), IL23R (2), MUC22 (1), PTPN22 (3), STAT4 (2), FBXL19 (3)	0.08805	0.19178	2.155e-17	3.600e-16	
Psoriatic arthritis	Stevens-johnson syndrome	11	4	HLA-C (2), TAP2 (1), POU5F1 (1), HLA-DQB1 (2), HLA-B (4), MICA (1), MUC22 (1), NOS2 (3), SLC22A23 (1), HLA-F (1), BAG6 (1)	0.07801	0.15068	7.499e-14	9.785e-13	
Psoriatic arthritis	Toxic epidermal necrolysis	9	2	HLA-C (2), TAP2 (1), POU5F1 (1), HLA-B (2), MICA (1), MUC22 (1), SLC22A23 (1), HLA-F (1), BAG6 (1)	0.08824	0.24324	8.128e-14	1.059e-12	
Inflammatory skin disease	Psoriatic arthritis	9	2	IFIH1 (1), TNIP1 (1), REV3L (1), TRAF3IP2 (3), FAP (1), IL23R (1), NOS2 (3), TNFAIP3 (1), STAT2 (1)	0.06383	0.12329	8.040e-11	8.088e-10	
Carnitine deficiency	Psoriatic arthritis	1	1	SLC22A5 (3)	0.01351	1.00000	4.741e-3	5.862e-3	
Congenital factor x deficiency	Psoriatic arthritis	1	1	F10 (4)	0.01351	1.00000	4.741e-3	5.862e-3	
Factor x deficiency	Psoriatic arthritis	1	1	F10 (4)	0.01351	1.00000	4.741e-3	5.862e-3	
Gestational trophoblastic disease	Psoriatic arthritis	1	1	POU5F1 (2)	0.01351	1.00000	4.741e-3	5.862e-3	
Intellectual developmental disorder language neurodegenerative	Psoriatic arthritis	1	1	NR4A2 (5)	0.01351	1.00000	4.741e-3	5.862e-3	
Psoriatic arthritis	Systemic primary carnitine deficiency	1	1	SLC22A5 (4)	0.01351	1.00000	4.741e-3	5.862e-3	