

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 "Pulmonary hypertension" (17 matching pairs). · Rows: 17 · Generated: 2026-10-10 23:50:05

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	p-value	FDR Q-value	Shared Cluster
Pulmonary arterial hypertension	Pulmonary hypertension	16	16	TBX4 (3), BMPR1B (2), CBLN2 (2), EIF2AK4 (3), CAV1 (7), SMAD4 (2), SMAD9 (8), ENG (2), KCNA5 (2), BMPR2 (8), GDF2 (5), KCNK3 (6)	0.17582	0.35556	2.556e-28	7.338e-27	
Cor pulmonale	Thromboembolic pulmonary hypertension	6	0	FGA (1), ABO (1), SLC44A2 (1), FGG (1), F11 (1), TSPAN15 (1)	0.31579	0.66667	2.270e-17	3.789e-16	149
Congestive heart failure	Pulmonary hypertension	15	14	EDNRB (2), ACE (2), NOS3 (2), SOD2 (2), TNF (2), SLC6A4 (2), HIF1A (2), NPPB (2), CCL2 (2), RYR1 (1), ACE2 (2), EDN1 (2)	0.06637	0.24590	2.342e-16	3.662e-15	
Pulmonary fibrosis	Pulmonary hypertension	10	10	ACE (2), TNF (2), CAV1 (5), CXCL8 (2), CCL2 (2), ACE2 (2), EDN1 (2), CALCA (2), TGFA (2), ABCA3 (2)	0.06289	0.16393	1.148e-11	1.255e-10	
Cardiomegaly	Pulmonary hypertension	8	1	NOS3 (1), SOD2 (1), TNF (1), CAV1 (5), HIF1A (1), NPPB (1), EDN1 (1), HTR2B (1)	0.05797	0.13115	1.300e-9	1.167e-8	
Hereditary hemorrhagic telangiectasia	Pulmonary hypertension	4	4	SMAD4 (3), ENG (7), GDF2 (7), ACVRL1 (7)	0.06154	0.57143	7.732e-9	6.398e-8	
Pulmonary hypertension	Sleep apnea	6	6	ACE (2), NOS3 (2), TNF (2), SLC6A4 (2), EDN1 (2), LEPR (2)	0.05714	0.12245	3.680e-8	2.767e-7	
Afibrinogenemia	Thromboembolic pulmonary hypertension	2	2	FGA (2), FGG (2)	0.18182	0.66667	9.108e-7	5.367e-6	149
Congenital hypofibrinogenemia	Thromboembolic pulmonary hypertension	2	2	FGA (2), FGG (2)	0.18182	0.66667	9.108e-7	5.367e-6	149
Congenital fibrinogen deficiency	Thromboembolic pulmonary hypertension	2	2	FGA (4), FGG (3)	0.18182	0.66667	9.108e-7	5.367e-6	149
Congenital afibrinogenemia	Thromboembolic pulmonary hypertension	2	2	FGA (3), FGG (2)	0.18182	0.66667	9.108e-7	5.367e-6	149
Factor xi deficiency	Thromboembolic pulmonary hypertension	1	1	F11 (4)	0.10000	1.00000	5.845e-4	1.156e-3	
Congenital factor xi deficiency	Thromboembolic pulmonary hypertension	1	1	F11 (3)	0.10000	1.00000	5.845e-4	1.156e-3	
Three-vessel coronary artery disease	Thromboembolic pulmonary hypertension	1	1	ABO (2)	0.08333	0.33333	1.753e-3	2.609e-3	
Pulmonary hypertension	pulmonary veno-occlusive disease and/or pulmonary capillary haemangiomatosis	1	1	EIF2AK4 (3)	0.01613	1.00000	3.962e-3	5.015e-3	
Gaucher disease-ophthalmoplegia-cardiovascular calcification syndrome	Pulmonary hypertension	1	1	GBA1 (4)	0.01613	1.00000	3.962e-3	5.015e-3	
Borderline personality disorder	Pulmonary hypertension	1	1	TPH1 (2)	0.01613	1.00000	3.962e-3	5.015e-3	