

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 "Interstitial lung disease" (48 matching pairs). · Rows: 48 · Generated: 2026-10-11 12:45:48

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Idiopathic pulmonary fibrosis	Interstitial lung disease	20	13	RTEL1 (4), TERT (6), DEPTOR (1), MAPT (1), IVD (1), DSP (4), MUC5B (6), AKAP13 (1), MUC5AC (1), SFTPC (5), SPDL1 (1), STN1 (4)	0.15504	0.30303	9.278e-31	2.882e-29	
Interstitial lung disease	Pulmonary fibrosis	14	8	RTEL1 (1), TERT (4), ARL17B (1), DSP (3), MUC5B (4), IL1RN (2), MUC5AC (1), SFTPC (4), SPDL1 (1), FAM13A (3), LRRC34 (1), SFTPA1 (5)	0.08750	0.21212	1.460e-17	2.459e-16	
Interstitial lung disease	Obstructive airway disease	9	6	RTEL1 (1), TERT (4), DSP (2), HLA-DPB1 (2), IL1RN (1), SFTPC (4), FAM13A (2), SFTPA1 (5), TOLLIP (1)	0.05696	0.13636	3.883e-10	3.660e-9	
Interstitial lung disease	Pulmonary surfactant metabolism dysfunction	3	2	BMP1 (1), SFTPC (6), ABCA3 (7)	0.04286	0.50000	1.491e-6	8.495e-6	
Interstitial lung disease	Systemic sclerosis	3	1	RTEL1 (2), HLA-DPB1 (1), HLA-DPA1 (1)	0.03797	0.20000	3.299e-5	1.523e-4	
Congenital phimos	epidermolysis bullosa, junctional 7, with interstitial lung disease and nephrotic syndrome	1	1	ITGA3 (2)	0.50000	1.00000	6.494e-5	2.331e-4	
Respiratory distress with surfactant metabolism deficiency	SFTPC-related interstitial lung disease	1	1	SFTPC (4)	0.50000	1.00000	6.494e-5	2.331e-4	
Chromosome 22q11.2 deletion syndrome	interstitial lung disease due to ABCA3 deficiency	1	1	ABCA3 (2)	0.50000	1.00000	6.494e-5	2.331e-4	408
Congenital nephrotic syndrome, interstitial lung disease, epidermolysis bullosa syndrome	Congenital phimos	1	0	ITGA3 (1)	0.50000	1.00000	6.494e-5	2.331e-4	
Congenital nephrotic syndrome, interstitial lung disease, epidermolysis bullosa syndrome	epidermolysis bullosa, junctional 7, with interstitial lung disease and nephrotic syndrome	1	1	ITGA3 (2)	0.50000	1.00000	6.494e-5	2.331e-4	
Autoimmune interstitial lung disease-arthritis syndrome	Autoinflammation and autoimmunity, systemic, with immune dysregulation 1	1	1	COPA (5)	0.33333	1.00000	1.299e-4	3.931e-4	
Chromosome 16p11.2 deletion syndrome	interstitial lung disease 1	1	1	SFTPA1 (2)	0.33333	1.00000	1.299e-4	3.931e-4	
Pulmonary surfactant metabolism dysfunction	SFTPC-related interstitial lung disease	1	1	SFTPC (6)	0.14286	1.00000	3.897e-4	8.665e-4	
interstitial lung disease due to ABCA3 deficiency	Pulmonary surfactant metabolism dysfunction	1	1	ABCA3 (4)	0.14286	1.00000	3.897e-4	8.665e-4	
Hyperammonemia	interstitial lung disease due to ABCA3 deficiency	1	1	ABCA3 (2)	0.11111	1.00000	5.195e-4	1.061e-3	408
interstitial lung disease due to ABCA3 deficiency	Pulmonary alveolar proteinosis	1	1	ABCA3 (2)	0.10000	1.00000	5.845e-4	1.156e-3	

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Pulmonary alveolar proteinosis	SFTPC-related interstitial lung disease	1	1	SFTPC (2)	0.10000	1.00000	5.845e-4	1.156e-3	
Autoimmune interstitial lung disease-arthritis syndrome	Cold autoinflammatory syndrome	1	1	NLRP12 (4)	0.12500	0.50000	7.792e-4	1.405e-3	
interstitial lung disease due to ABCA3 deficiency	Loeys-dietz syndrome	1	1	ABCA3 (2)	0.05882	1.00000	1.039e-3	1.739e-3	
epidermolysis bullosa, junctional 7, with interstitial lung disease and nephrotic syndrome	Junctional epidermolysis bullosa	1	1	ITGA3 (7)	0.05263	1.00000	1.169e-3	1.895e-3	
Congenital nephrotic syndrome, interstitial lung disease, epidermolysis bullosa syndrome	Junctional epidermolysis bullosa	1	1	ITGA3 (7)	0.05263	1.00000	1.169e-3	1.895e-3	
Osteogenesis imperfecta	SFTPC-related interstitial lung disease	1	1	SFTPC (2)	0.02500	1.00000	2.533e-3	3.446e-3	
Bronchopulmonary dysplasia	epidermolysis bullosa, junctional 7, with interstitial lung disease and nephrotic syndrome	1	1	ITGA3 (2)	0.02174	1.00000	2.922e-3	3.876e-3	
Bronchopulmonary dysplasia	Congenital nephrotic syndrome, interstitial lung disease, epidermolysis bullosa syndrome	1	0	ITGA3 (1)	0.02174	1.00000	2.922e-3	3.876e-3	
Bronchopulmonary dysplasia	interstitial lung disease 1	1	1	SFTPA1 (2)	0.02174	1.00000	2.922e-3	3.876e-3	
Arthritis	Autoimmune interstitial lung disease-arthritis syndrome	1	1	COPA (5)	0.03571	0.50000	3.374e-3	4.374e-3	
Interstitial lung disease	Laryngo-onycho-cutaneous syndrome	1	1	LAMA3 (5)	0.01493	1.00000	4.286e-3	5.383e-3	
Interstitial lung disease	isovaleric acidemia	1	1	IVD (2)	0.01493	1.00000	4.286e-3	5.383e-3	
Interstitial lung disease	primary ciliary dyskinesia 28	1	1	SPAG1 (2)	0.01493	1.00000	4.286e-3	5.383e-3	
Interstitial lung disease	Respiratory distress with surfactant metabolism deficiency	1	1	SFTPC (5)	0.01493	1.00000	4.286e-3	5.383e-3	
Interstitial lung disease	SFTPC-related interstitial lung disease	1	1	SFTPC (5)	0.01493	1.00000	4.286e-3	5.383e-3	
Interstitial lung disease	interstitial lung disease 2	1	1	SFTPA2 (5)	0.01493	1.00000	4.286e-3	5.383e-3	
Interstitial lung disease	interstitial lung disease 1	1	1	SFTPA1 (5)	0.01493	1.00000	4.286e-3	5.383e-3	
hermansky-pudlak syndrome 7	Interstitial lung disease	1	1	DTNBP1 (2)	0.01493	1.00000	4.286e-3	5.383e-3	
hermansky-pudlak syndrome 4	Interstitial lung disease	1	1	HPS4 (2)	0.01493	1.00000	4.286e-3	5.383e-3	

Disease A	Disease B	Shared Genes	Corroborated Shared Genes	Shared Gene Names	Similarity Score	Overlap Coefficient	P-value	FDR Q-value	Shared Cluster
Cavitary optic disc anomalies	Interstitial lung disease	1	1	MMP19 (3)	0.01493	1.00000	4.286e-3	5.383e-3	
Brain calcification	Interstitial lung disease	1	1	FARSB (2)	0.01493	1.00000	4.286e-3	5.383e-3	
Autoimmune interstitial lung disease-arthritis syndrome	Autoinflammatory syndrome	1	0	NLRP12 (1)	0.02564	0.50000	4.800e-3	5.921e-3	
Idiopathic pulmonary fibrosis	interstitial lung disease 1	1	1	SFTPA1 (3)	0.01205	1.00000	5.325e-3	6.490e-3	
Idiopathic pulmonary fibrosis	interstitial lung disease 2	1	1	SFTPA2 (5)	0.01205	1.00000	5.325e-3	6.490e-3	
Anemia	epidermolysis bullosa, junctional 7, with interstitial lung disease and nephrotic syndrome	1	1	ITGA3 (2)	0.01176	1.00000	5.455e-3	6.632e-3	
Anemia	Congenital nephrotic syndrome, interstitial lung disease, epidermolysis bullosa syndrome	1	0	ITGA3 (1)	0.01176	1.00000	5.455e-3	6.632e-3	
interstitial lung disease 1	Obstructive airway disease	1	1	SFTPA1 (2)	0.00990	1.00000	6.494e-3	7.751e-3	
Autoimmune interstitial lung disease-arthritis syndrome	Bell's palsy	1	1	NLRP12 (2)	0.01724	0.50000	7.261e-3	8.574e-3	
Chromosome 16p11.2 deletion syndrome	Interstitial lung disease	1	1	SFTPA1 (5)	0.01471	0.50000	8.554e-3	9.897e-3	
Cerebellar, ocular, craniofacial, and genital syndrome	Interstitial lung disease	1	1	NBEA (2)	0.01471	0.50000	8.554e-3	9.897e-3	
inherited interstitial lung disease	Parkinson disease	1	1	LAMP3 (2)	0.00189	1.00000	3.436e-2	3.633e-2	2
Bipolar disorder	inherited interstitial lung disease	1	1	LAMP3 (2)	0.00082	1.00000	7.923e-2	8.034e-2	2