

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  $\geq 2$  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: 2026-10-12 03:00:13. Filters applied: disease name contains "Ataxia-pancytopenia syndrome" (5 matching pairs). · Rows: 5 · Generated: 2026-10-11 23:19:55

| Disease A                    | Disease B                          | Shared Genes | Corroborated Shared Genes | Shared Gene Names | Similarity Score | Overlap Coefficient | P-value  | FDR Q-value | Shared Cluster |
|------------------------------|------------------------------------|--------------|---------------------------|-------------------|------------------|---------------------|----------|-------------|----------------|
| Ataxia-pancytopenia syndrome | Spectrum and myeloid neoplasm risk | 1            | 1                         | SAMD9L (6)        | 0.33333          | 1.00000             | 1.299e-4 | 3.931e-4    |                |
| Ataxia-pancytopenia syndrome | Autoinflammatory syndrome          | 1            | 1                         | SAMD9L (5)        | 0.02632          | 1.00000             | 2.403e-3 | 3.313e-3    |                |
| Ataxia-pancytopenia syndrome | Spinocerebellar ataxia             | 1            | 1                         | SAMD9L (5)        | 0.00952          | 1.00000             | 6.754e-3 | 8.025e-3    |                |
| Ataxia-pancytopenia syndrome | Systemic sclerosis                 | 1            | 1                         | SAMD9L (5)        | 0.00775          | 1.00000             | 8.313e-3 | 9.631e-3    |                |
| Ataxia-pancytopenia syndrome | Systemic lupus erythematosus       | 1            | 1                         | SAMD9L (5)        | 0.00153          | 1.00000             | 4.247e-2 | 4.427e-2    |                |