

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: 2026-10-11 03:00:14. Filters applied: disease name contains "Intellectual developmental disorder with retinitis pigmentosa" (5 matching pairs). · Rows: 5 · Generated: 2026-10-11 03:20:21

| Disease A                                                     | Disease B                                                     | Shared Genes | Corroborated Shared Genes | Shared Gene Names | Similarity Score | Overlap Coefficient | P-value  | FDR Q-value | Shared Cluster |
|---------------------------------------------------------------|---------------------------------------------------------------|--------------|---------------------------|-------------------|------------------|---------------------|----------|-------------|----------------|
| Intellectual developmental disorder with retinitis pigmentosa | Rod-cone dystrophy                                            | 1            | 1                         | SCAPER (4)        | 0.02941          | 1.00000             | 2.143e-3 | 3.044e-3    |                |
| Brachydactyly                                                 | Intellectual developmental disorder with retinitis pigmentosa | 1            | 1                         | SCAPER (4)        | 0.04545          | 1.00000             | 1.364e-3 | 2.148e-3    |                |
| Dental enamel hypoplasia                                      | Intellectual developmental disorder with retinitis pigmentosa | 1            | 1                         | SCAPER (5)        | 0.05882          | 1.00000             | 1.039e-3 | 1.739e-3    |                |
| Intellectual developmental disorder with retinitis pigmentosa | Intracranial hemorrhage                                       | 1            | 1                         | SCAPER (5)        | 0.07143          | 1.00000             | 8.443e-4 | 1.499e-3    |                |
| Coronary thrombosis                                           | Intellectual developmental disorder with retinitis pigmentosa | 1            | 1                         | SCAPER (5)        | 0.07692          | 1.00000             | 7.793e-4 | 1.405e-3    |                |