

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: 2026-10-20 03:00:20. Filters applied: disease name contains "Fundus albipunctatus" (5 matching pairs). · Rows: 5 · Generated: 2026-10-20 08:53:34

| Disease A                 | Disease B                               | Shared Genes | Corroborated Shared Genes | Shared Gene Names   | Similarity Score | Overlap Coefficient | P-value  | FDR Q-value | Shared Cluster |
|---------------------------|-----------------------------------------|--------------|---------------------------|---------------------|------------------|---------------------|----------|-------------|----------------|
| Fundus albipunctatus      | Retinitis punctata albescens            | 2            | 2                         | RDH5 (3), RLBP1 (4) | 0.28571          | 1.00000             | 1.251e-7 | 8.632e-7    |                |
| Fundus albipunctatus      | Night blindness, congenital stationary  | 2            | 2                         | RDH5 (2), RLBP1 (2) | 0.07143          | 1.00000             | 2.927e-6 | 1.681e-5    |                |
| Fundus albipunctatus      | Macular degeneration                    | 2            | 2                         | RDH5 (2), RLBP1 (3) | 0.02899          | 1.00000             | 1.899e-5 | 9.974e-5    |                |
| Bothnia retinal dystrophy | Fundus albipunctatus                    | 1            | 1                         | RLBP1 (7)           | 0.33333          | 1.00000             | 1.291e-4 | 3.269e-4    |                |
| Fundus albipunctatus      | Macular and posterior pole degeneration | 1            | 1                         | RDH5 (2)            | 0.06667          | 0.50000             | 1.678e-3 | 2.343e-3    |                |