# GeDiPNet Shared-Gene Disease Pairs

Similarity: Jaccard index on shared curated genes (disease_gdp). Significance: upper-tail hypergeometric test (P(X>=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: 2026-10-22 03:00:19. Filters applied: disease name contains "Mental retardation, autosomal dominant 57" (5 matching pairs). · Rows: 5 · Generated: 2026-10-21 22:12:36

| 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, autosomal dominant 57 | Mental retardation, autosomal dominant 57 | 1 | 0 | TLK2 (1) | 0.50000 | 1.00000 | 6.457e-5 | 1.985e-4 | |
| Hoarding disorder | Mental retardation, autosomal dominant 57 | 1 | 1 | TLK2 (2) | 0.04762 | 1.00000 | 1.291e-3 | 1.889e-3 | |
| Complex neurodevelopmental disorder | Mental retardation, autosomal dominant 57 | 1 | 1 | TLK2 (2) | 0.00741 | 1.00000 | 8.652e-3 | 9.794e-3 | |
| Developmental disability | Mental retardation, autosomal dominant 57 | 1 | 1 | TLK2 (2) | 0.00694 | 1.00000 | 9.233e-3 | 1.038e-2 | |
| Intellectual developmental disorder | Mental retardation, autosomal dominant 57 | 1 | 1 | TLK2 (5) | 0.00123 | 1.00000 | 5.262e-2 | 5.418e-2 | |