

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: 2026-10-10 03:00:13. Filters applied: disease name contains "AHDC1-related intellectual disability - obstructive sleep apnea - mild dysmorphism syndrome" (5 matching pairs). · Rows: 5 · Generated: 2026-10-10 08:32:30

| Disease A                                                                                   | Disease B                                                               | Shared Genes | Corroborated Shared Genes | Shared Gene Names | Similarity Score | Overlap Coefficient | P-value  | FDR Q-value | Shared Cluster |
|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------|---------------------------|-------------------|------------------|---------------------|----------|-------------|----------------|
| AHDC1-related intellectual disability - obstructive sleep apnea - mild dysmorphism syndrome | Myocardial infarction                                                   | 1            | 1                         | AHDC1 (2)         | 0.00172          | 1.00000             | 3.767e-2 | 3.951e-2    |                |
| AHDC1-related intellectual disability - obstructive sleep apnea - mild dysmorphism syndrome | Global developmental delay                                              | 1            | 1                         | AHDC1 (2)         | 0.00270          | 1.00000             | 2.403e-2 | 2.575e-2    |                |
| AHDC1-related intellectual disability - obstructive sleep apnea - mild dysmorphism syndrome | Sleep apnea                                                             | 1            | 1                         | AHDC1 (2)         | 0.02000          | 1.00000             | 3.182e-3 | 4.168e-3    |                |
| AHDC1-related intellectual disability - obstructive sleep apnea - mild dysmorphism syndrome | Cerebellar hypoplasia/atrophy, epilepsy, and global developmental delay | 1            | 1                         | AHDC1 (2)         | 0.02703          | 1.00000             | 2.338e-3 | 3.243e-3    |                |
| AHDC1-related intellectual disability - obstructive sleep apnea - mild dysmorphism syndrome | Xia-gibbs syndrome                                                      | 1            | 1                         | AHDC1 (3)         | 0.50000          | 1.00000             | 6.494e-5 | 2.331e-4    |                |