

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 "Hydatidiform mole" (6 matching pairs). · Rows: 6 · Generated: 2026-10-11 04:59:45

| Disease A           | Disease B                 | Shared Genes | Corroborated Shared Genes | Shared Gene Names     | Similarity Score | Overlap Coefficient | P-value  | FDR Q-value | Shared Cluster |
|---------------------|---------------------------|--------------|---------------------------|-----------------------|------------------|---------------------|----------|-------------|----------------|
| Breast cancer       | Hydatidiform mole         | 1            | 1                         | TOP6BL (5)            | 0.00093          | 0.16667             | 3.496e-1 | 3.497e-1    |                |
| Atrial fibrillation | Hydatidiform mole         | 1            | 1                         | MEI1 (6)              | 0.00115          | 0.16667             | 2.926e-1 | 2.927e-1    |                |
| Gout                | Hydatidiform mole         | 1            | 1                         | TOP6BL (5)            | 0.00121          | 0.16667             | 2.796e-1 | 2.798e-1    |                |
| Alzheimer disease   | Partial hydatidiform mole | 1            | 1                         | NLRP7 (2)             | 0.00045          | 0.50000             | 2.673e-1 | 2.675e-1    |                |
| Hydatidiform mole   | Keratoconus               | 1            | 0                         | KIR3DL1 (1)           | 0.00855          | 0.16667             | 4.249e-2 | 4.429e-2    |                |
| Hydatidiform mole   | Partial hydatidiform mole | 2            | 2                         | NLRP7 (6), KHDC3L (6) | 0.28571          | 1.00000             | 1.265e-7 | 8.712e-7    |                |