

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 "papillary renal cell carcinoma" (10 matching pairs). · Rows: 10 · Generated: 2026-10-11 06:03:36

| Disease A                                 | Disease B                                 | Shared Genes | Corroborated Shared Genes | Shared Gene Names | Similarity Score | Overlap Coefficient | P-value  | FDR Q-value | Shared Cluster |
|-------------------------------------------|-------------------------------------------|--------------|---------------------------|-------------------|------------------|---------------------|----------|-------------|----------------|
| Osteofibrous dysplasia                    | papillary renal cell carcinoma            | 1            | 1                         | MET (6)           | 0.50000          | 1.00000             | 6.494e-5 | 2.331e-4    |                |
| Chromophobe renal cell carcinoma          | Clear cell papillary renal cell carcinoma | 1            | 0                         | HNF1A (1)         | 0.20000          | 1.00000             | 2.598e-4 | 6.509e-4    |                |
| Clear cell papillary renal cell carcinoma | Waardenburg syndrome type 2               | 1            | 1                         | MITF (2)          | 0.20000          | 1.00000             | 2.598e-4 | 6.509e-4    |                |
| Clear cell papillary renal cell carcinoma | Hepatic adenoma                           | 1            | 1                         | HNF1A (5)         | 0.16667          | 0.50000             | 5.195e-4 | 1.061e-3    |                |
| Clear cell papillary renal cell carcinoma | Insulin resistant diabetes mellitus       | 1            | 1                         | HNF1A (2)         | 0.16667          | 0.50000             | 5.195e-4 | 1.061e-3    |                |
| Copper overload cirrhosis                 | papillary renal cell carcinoma            | 1            | 1                         | MET (3)           | 0.08333          | 1.00000             | 7.144e-4 | 1.335e-3    |                |
| Clear cell papillary renal cell carcinoma | Waardenburg-shah syndrome                 | 1            | 1                         | MITF (2)          | 0.12500          | 0.25000             | 1.039e-3 | 1.739e-3    |                |
| Distal arthrogryposis                     | papillary renal cell carcinoma            | 1            | 1                         | MET (5)           | 0.05882          | 1.00000             | 1.039e-3 | 1.739e-3    |                |
| Lymphedema                                | papillary renal cell carcinoma            | 1            | 1                         | MET (2)           | 0.05882          | 1.00000             | 1.039e-3 | 1.739e-3    |                |
| Carcinogenesis                            | papillary renal cell carcinoma            | 1            | 1                         | MET (2)           | 0.05263          | 1.00000             | 1.169e-3 | 1.895e-3    |                |