

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 "nemaline myopathy 5" (4 matching pairs). · Rows: 4 · Generated: 2026-10-11 03:15:12

| Disease A               | Disease B           | Shared Genes | Corroborated Shared Genes | Shared Gene Names | Similarity Score | Overlap Coefficient | P-value  | FDR Q-value | Shared Cluster |
|-------------------------|---------------------|--------------|---------------------------|-------------------|------------------|---------------------|----------|-------------|----------------|
| Amish nemaline myopathy | nemaline myopathy 5 | 1            | 1                         | TNNT1 (2)         | 0.50000          | 1.00000             | 6.494e-5 | 2.331e-4    |                |
| Nemaline myopathy       | nemaline myopathy 5 | 1            | 1                         | TNNT1 (6)         | 0.05263          | 1.00000             | 1.169e-3 | 1.895e-3    |                |
| Myopathy                | nemaline myopathy 5 | 1            | 1                         | TNNT1 (2)         | 0.00885          | 1.00000             | 7.274e-3 | 8.577e-3    |                |
| Cardiomyopathy          | nemaline myopathy 5 | 1            | 1                         | TNNT1 (2)         | 0.00408          | 1.00000             | 1.585e-2 | 1.746e-2    |                |