# 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: 2026-10-21 12:58:11. Filters applied: disease name contains "Congenital myasthenic syndrome 7" (5 matching pairs). · Rows: 5 · Generated: 2026-10-21 17:04:38

| Disease A | Disease B | Shared Genes | Corroborated Shared Genes | Shared Gene Names | Similarity Score | Overlap Coefficient | P-value | FDR Q-value | Shared Cluster |
|---|---|---|---|---|---|---|---|---|---|
| Congenital myasthenic syndrome 7 | Myasthenic syndrome, congenital, 7a, presynaptic, and distal motor neuropathy, autosomal dominant | 1 | 1 | SYT2 (2) | 0.50000 | 1.00000 | 6.457e-5 | 1.985e-4 | |
| Congenital myasthenic syndrome 7 | Presynaptic congenital myasthenic syndrome | 1 | 1 | SYT2 (5) | 0.08333 | 1.00000 | 7.102e-4 | 1.174e-3 | |
| Congenital myasthenic syndrome 7 | Thyroid gland neoplasms | 1 | 1 | SYT2 (2) | 0.04762 | 1.00000 | 1.291e-3 | 1.889e-3 | |
| Congenital myasthenic syndrome | Congenital myasthenic syndrome 7 | 1 | 1 | SYT2 (3) | 0.03030 | 1.00000 | 2.066e-3 | 2.786e-3 | |
| Congenital myasthenic syndrome 7 | Myasthenic syndrome | 1 | 1 | SYT2 (6) | 0.02439 | 1.00000 | 2.583e-3 | 3.337e-3 | |