

## 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 "Hemophagocytic lymphohistiocytosis" (12 matching pairs). · Rows: 12 · Generated: 2026-10-11 02:17:20

| Disease A                                     | Disease B                                     | Shared Genes | Corroborated Shared Genes | Shared Gene Names                           | Similarity Score | Overlap Coefficient | P-value   | FDR Q-value | Shared Cluster |
|-----------------------------------------------|-----------------------------------------------|--------------|---------------------------|---------------------------------------------|------------------|---------------------|-----------|-------------|----------------|
| Hemophagocytic lymphohistiocytosis            | Hereditary hemophagocytic lymphohistiocytosis | 4            | 4                         | PRF1 (7), UNC13D (8), STX11 (6), STXBP2 (7) | 0.44444          | 1.00000             | 2.990e-14 | 4.025e-13   |                |
| Autoinflammatory syndrome                     | Hereditary hemophagocytic lymphohistiocytosis | 4            | 4                         | PRF1 (2), UNC13D (2), STX11 (2), STXBP2 (2) | 0.10526          | 1.00000             | 2.821e-11 | 2.958e-10   |                |
| Autoinflammatory syndrome                     | Hemophagocytic lymphohistiocytosis            | 4            | 4                         | PRF1 (7), UNC13D (7), STX11 (6), STXBP2 (7) | 0.09524          | 0.50000             | 1.961e-9  | 1.721e-8    |                |
| HAVCR2-related cancer predisposition          | Hemophagocytic lymphohistiocytosis            | 1            | 1                         | HAVCR2 (3)                                  | 0.11111          | 1.00000             | 5.195e-4  | 1.061e-3    |                |
| Hemophagocytic lymphohistiocytosis            | Reducing body myopathy                        | 1            | 1                         | FHL1 (4)                                    | 0.11111          | 1.00000             | 5.195e-4  | 1.061e-3    |                |
| Hemophagocytic lymphohistiocytosis            | Uruguay faciocardio-musculoskeletal syndrome  | 1            | 1                         | FHL1 (3)                                    | 0.11111          | 1.00000             | 5.195e-4  | 1.061e-3    |                |
| Hemophagocytic lymphohistiocytosis            | X-linked scapuloperoneal muscular dystrophy   | 1            | 1                         | FHL1 (4)                                    | 0.11111          | 1.00000             | 5.195e-4  | 1.061e-3    |                |
| Hereditary hemophagocytic lymphohistiocytosis | Microvillus inclusion disease                 | 1            | 1                         | STXBP2 (3)                                  | 0.14286          | 0.33333             | 7.792e-4  | 1.405e-3    |                |
| Congenital lactic acidosis                    | Hereditary hemophagocytic lymphohistiocytosis | 1            | 1                         | STXBP2 (2)                                  | 0.12500          | 0.25000             | 1.039e-3  | 1.739e-3    |                |
| Carotid artery thrombosis                     | Hereditary hemophagocytic lymphohistiocytosis | 1            | 1                         | STXBP2 (3)                                  | 0.10000          | 0.25000             | 1.558e-3  | 2.376e-3    |                |
| Hemophagocytic lymphohistiocytosis            | Microvillus inclusion disease                 | 1            | 1                         | STXBP2 (7)                                  | 0.09091          | 0.33333             | 1.558e-3  | 2.376e-3    |                |
| Developmental disorder                        | Hereditary hemophagocytic lymphohistiocytosis | 1            | 1                         | STX11 (2)                                   | 0.05000          | 0.25000             | 4.150e-3  | 5.234e-3    |                |