

## 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 "Cerebral amyloid angiopathy" (18 matching pairs). · Rows: 18 · Generated: 2026-10-11 19:04:24

| Disease A                                | Disease B                                                                                  | Shared Genes | Corroborated Shared Genes | Shared Gene Names                                                                                                                 | Similarity Score | Overlap Coefficient | P-value   | FDR Q-value | Shared Cluster |
|------------------------------------------|--------------------------------------------------------------------------------------------|--------------|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------|-----------|-------------|----------------|
| Cerebral amyloid angiopathy              | Early-onset progressive encephalopathy-hearing loss-pons hypoplasia-brain atrophy syndrome | 1            | 1                         | TRAPPC12 (4)                                                                                                                      | 0.01370          | 0.50000             | 9.201e-3  | 1.051e-2    |                |
| Abri amyloidosis                         | Cerebral amyloid angiopathy                                                                | 1            | 1                         | ITM2B (3)                                                                                                                         | 0.01389          | 1.00000             | 4.611e-3  | 5.734e-3    |                |
| Cerebral amyloid angiopathy              | Uridine-cytidineuria                                                                       | 1            | 1                         | SLC28A1 (3)                                                                                                                       | 0.01389          | 1.00000             | 4.611e-3  | 5.734e-3    |                |
| Cerebral amyloid angiopathy              | leukodystrophy, adult-onset, autosomal dominant, without amyloid angiopathy                | 1            | 1                         | CST3 (3)                                                                                                                          | 0.01389          | 1.00000             | 4.611e-3  | 5.734e-3    |                |
| Cerebral amyloid angiopathy              | immunodeficiency 53                                                                        | 1            | 1                         | RELB (2)                                                                                                                          | 0.01389          | 1.00000             | 4.611e-3  | 5.734e-3    |                |
| Cerebral amyloid angiopathy              | immunodeficiency 122                                                                       | 1            | 1                         | POLD3 (2)                                                                                                                         | 0.01389          | 1.00000             | 4.611e-3  | 5.734e-3    |                |
| Cerebral amyloid angiopathy              | Familial danish dementia                                                                   | 1            | 1                         | ITM2B (3)                                                                                                                         | 0.01389          | 1.00000             | 4.611e-3  | 5.734e-3    |                |
| Acys amyloidosis                         | Cerebral amyloid angiopathy                                                                | 1            | 1                         | CST3 (4)                                                                                                                          | 0.01389          | 1.00000             | 4.611e-3  | 5.734e-3    |                |
| Cerebral amyloid angiopathy              | Vascular dementia                                                                          | 5            | 3                         | APP (6), ITM2B (3), APOE (3), GRIK2 (1), PRNP (1)                                                                                 | 0.02564          | 0.07042             | 3.081e-4  | 7.708e-4    |                |
| Amyloid neuropathy                       | cerebral amyloid angiopathy, app-related                                                   | 1            | 1                         | APP (3)                                                                                                                           | 0.25000          | 1.00000             | 1.948e-4  | 5.354e-4    | 116            |
| Cerebral amyloid angiopathy              | Conduct disorder                                                                           | 4            | 0                         | PTPRD (1), SLC7A2 (1), ADH1B (1), ADH1C (1)                                                                                       | 0.03333          | 0.07692             | 9.506e-5  | 3.379e-4    |                |
| cerebral amyloid angiopathy, app-related | Partial epilepsy with variable foci                                                        | 1            | 1                         | APP (2)                                                                                                                           | 0.50000          | 1.00000             | 6.494e-5  | 2.331e-4    | 116            |
| cerebral amyloid angiopathy, app-related | Eye manifestations                                                                         | 1            | 1                         | APP (2)                                                                                                                           | 0.50000          | 1.00000             | 6.494e-5  | 2.331e-4    | 116            |
| Amyloid angiopathy                       | cerebral amyloid angiopathy, app-related                                                   | 1            | 1                         | APP (3)                                                                                                                           | 0.50000          | 1.00000             | 6.494e-5  | 2.331e-4    | 116            |
| Abeta amyloidosis                        | cerebral amyloid angiopathy, app-related                                                   | 1            | 1                         | APP (2)                                                                                                                           | 0.50000          | 1.00000             | 6.494e-5  | 2.331e-4    | 116            |
| Cerebral amyloid angiopathy              | Dementia                                                                                   | 22           | 4                         | APP (6), ITM2B (3), APOE (3), DOCK10 (1), EFHB (1), FSTL5 (1), GRIK2 (1), KAZN (1), KCNH8 (1), NCK2 (1), NECTIN2 (1), PTPRD (1)   | 0.03438          | 0.30986             | 9.962e-15 | 1.399e-13   |                |
| Cerebral amyloid angiopathy              | Lewy body disease                                                                          | 13           | 1                         | APOC1 (1), APOE (3), CDKAL1 (1), KAZN (1), PTPRD (1), SGK1 (1), HS3ST4 (1), ATP10A (1), POLD3 (1), ABTB2 (1), KCNB2 (1), RAG1 (1) | 0.08442          | 0.18310             | 3.478e-16 | 5.374e-15   |                |

| Disease A        | Disease B                   | Shared Genes | Corroborated Shared Genes | Shared Gene Names                                                                                                                   | Similarity Score | Overlap Coefficient | P-value   | FDR Q-value | Shared Cluster |
|------------------|-----------------------------|--------------|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------|------------------|---------------------|-----------|-------------|----------------|
| Brain infarction | Cerebral amyloid angiopathy | 12           | 1                         | APOE (3), CDKAL1 (1), KAZN (1), PTPRD (1), SGK1 (1), HS3ST4 (1), ATP10A (1), POLD3 (1), ABTB2 (1), KCNB2 (1), RAG1 (1), SLC29A4 (1) | 0.12500          | 0.33333             | 3.985e-20 | 7.652e-19   |                |