

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: **Summary of significantly associated genetic clusters with the vulnerable 'last in, first out' brain network. Lead variant in bold.**

UK Biobank nIDP associations related to modifiable risk factors for dementia are also in bold; nIDP corresponding exactly to the best modifiable risk factors are underlined (based on <https://genetics.opentargets.org/>).

P-values are derived from a two-sided linear association test.

File Name: Supplementary Data 2

Description: **Significant associations between rs312238 (CD99) and non-imaging phenotypes (n=16,924) in the genotyped participants who had not been scanned (n=374,230)**

File Name: Supplementary Data 3

Description: **Extended Table 2. Details and associations with the vulnerable 'last in, first out' brain network for each modifiable risk factor (MRF) across 15 different categories.**

'Best' MRFs are in bold. P-values are derived from a two-sided linear association test.

File Name: Supplementary Data 4

Description: **Full list of variants in the MAPT region significantly associated with the vulnerable LIFO brain network (Cluster 5)**

File Name: Supplementary Data 5

Description: **Correlations between 'best' modifiable risk factors and the 6 confounders (bottom left of matrix: partial correlation; top right of matrix: full correlation).** Top Matrix: correlations; bottom matrix: corresponding P-values. Non-significant results are in grey.