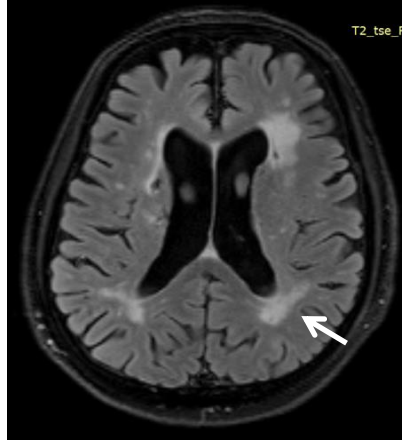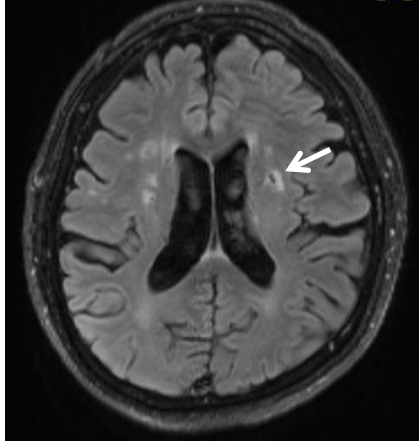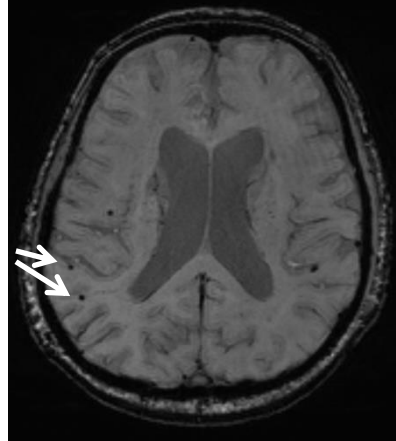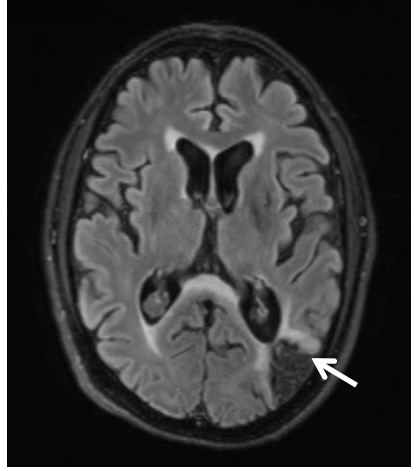*Supplementary material*

Construction of the total CeVD scale

The weighted CeVD scale is constructed based on statistical models. General linear regression analysis was performed to establish the individual weight of each CeVD marker on global cognitive function on the basis of linear regression coefficient established between CeVD indicators and cognitive performance. Moderate-to-severe WMH was independently associated with lower global cognitive score (β [SE]=−0.21 [0.16];P<0.001) whilst no other CeVD indicator showed an independent association with global cognition. Subsequently the combined effect of all other markers on global cognition was examined using the same statistical methods and it was found that the presence of ≥2 CeVD indicators was significantly associated with worse global cognitive performance (β[SE]=−0.09 [0.18]; P<0.01), independent of WMH.

The weight was determined by multiplying β coefficient values by 10 then rounding up to the nearest integers. In this way, a weighted CeVD burden scale was constructed with 2 points awarded when moderate or severe WMH was present (0.21 x 10 = 2.1 ≈ 2) and one point awarded when at least 2 CeVD markers were present (0.09 x 10 = 0.9 ≈ 1).

Fig I. Representative examples of the different CeVD indicators

White Matter Hyperintensities	Lacune	Microbleeds
Cortical Stroke	Intracranial Stenosis	