

## Appendix 1

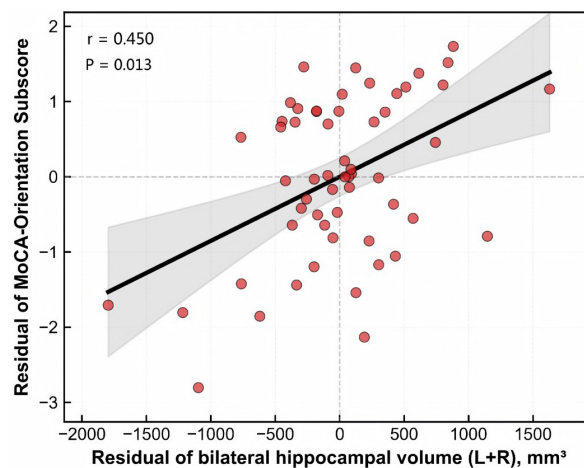
The preprocessing steps for CBF data were as follows:

Motion correction.

Normalization: CBF images were normalized to the Montreal Neurological Institute (MNI) space. The same transformation parameters were applied to the corresponding perfusion maps, which were then resampled to a voxel size of  $2 \times 2 \times 2$  mm.

Signal normalization: The CBF value of each voxel was normalized by dividing it by the global mean CBF of the whole brain.

Spatial smoothing: A  $6 \times 6 \times 6$  mm Gaussian kernel with full-width at half-maximum (FWHM) was applied to improve the signal-to-noise ratio.



**Figure S1** Partial correlation between bilateral whole hippocampal volume and orientation performance in ACMP patients. Scatter plot illustrating the association between bilateral whole hippocampal volume (left + right) and MoCA orientation subscore at the individual level. Both variables represent residuals after adjustment for age, sex, years of education, and ICV. The solid line indicates the fitted regression line, and the shaded area represents the 95% confidence interval. A significant positive association was observed (partial  $r=0.450$ , P-FDR =0.013). ACMP, acute carbon monoxide poisoning; FDR, false discovery rate; ICV, intracranial volume; L, left; MoCA, Montreal Cognitive Assessment; R, right.