



Supplementary Fig. 1. Group differences in HbO₂ concentrations of four different bilateral frontal regions. The normal group exhibited an overall higher HbO₂ concentration across the entire frontal lobe, whereas the group at risk of MCI had asymmetric frontal responses and lower HbO₂ concentrations. The red stars indicate statistical significance ($p < 0.05$). DLPFC, dorsolateral prefrontal cortex; VLPFC, ventrolateral prefrontal cortex; FPPFC, frontopolar prefrontal cortex; OFC, orbitofrontal cortex; HbO₂, oxygenated hemoglobin; MCI, mild cognitive impairment.