

Table S1 Location of lacunar infarcts and corresponding cortex

Patients	Location of lacunar infarction	Identified cortex based on atlas	Handedness
001	Left subcortical white matter	Left postcentral	Right
002	Left subcortical white matter	Left posterior cingulate	Right
003	Right subcortical white matter	Right precentral	Right
004	Right brainstem	Right precentral	Right
005	Left basal ganglia region	Left precentral	Right
006	Right subcortical white matter	Right precentral	Right
007	Left basal ganglia region	Left caudal middle frontal	Right
008	Left basal ganglia region	Left precentral	Right
009	Right subcortical white matter	Right precentral	Right
010	Left brainstem	Left precentral	Right
011	Right subcortical white matter	Right pars triangularis	Right
012	Left subcortical white matter	Left precentral	Right
013	Right brainstem	Right superior frontal	Right
014	Left subcortical white matter	Left superior frontal	Right
015	Right brainstem	Right superior frontal	Right
016	Left basal ganglia region	Left superior frontal	Right
017	Left subcortical white matter	Left precentral	Right
018	Right basal ganglia region	Right superior frontal	Right
019	Left subcortical white matter	Left precentral	Right
020	Right subcortical white matter	Right precentral	Right
021	Right basal ganglia region	Right precentral	Right
022	Right subcortical white matter	Right precentral	Right
023	Right basal ganglia region	Right precentral	Right
024	Right brainstem	Right precentral	Right
025	Right subcortical white matter	Right precentral	Right
026	Left basal ganglia region	Left caudal middle frontal	Right
027	Left basal ganglia region	Left precentral	Right
028	Right basal ganglia region	Right precentral	Right
029	Left basal ganglia region	Left precentral	Right
030	Left subcortical white matter	Left superior frontal	Right
031	Left subcortical white matter	Left superior frontal	Right
032	Left brainstem	Left superior frontal	Right
033	Left subcortical white matter	Left precentral	Right
034	Left basal ganglia region	Left precentral	Right
035	Left subcortical white matter	Left precentral	Right
036	Left subcortical white matter	Left superior frontal	Right
037	Left subcortical white matter	Left precentral	Right

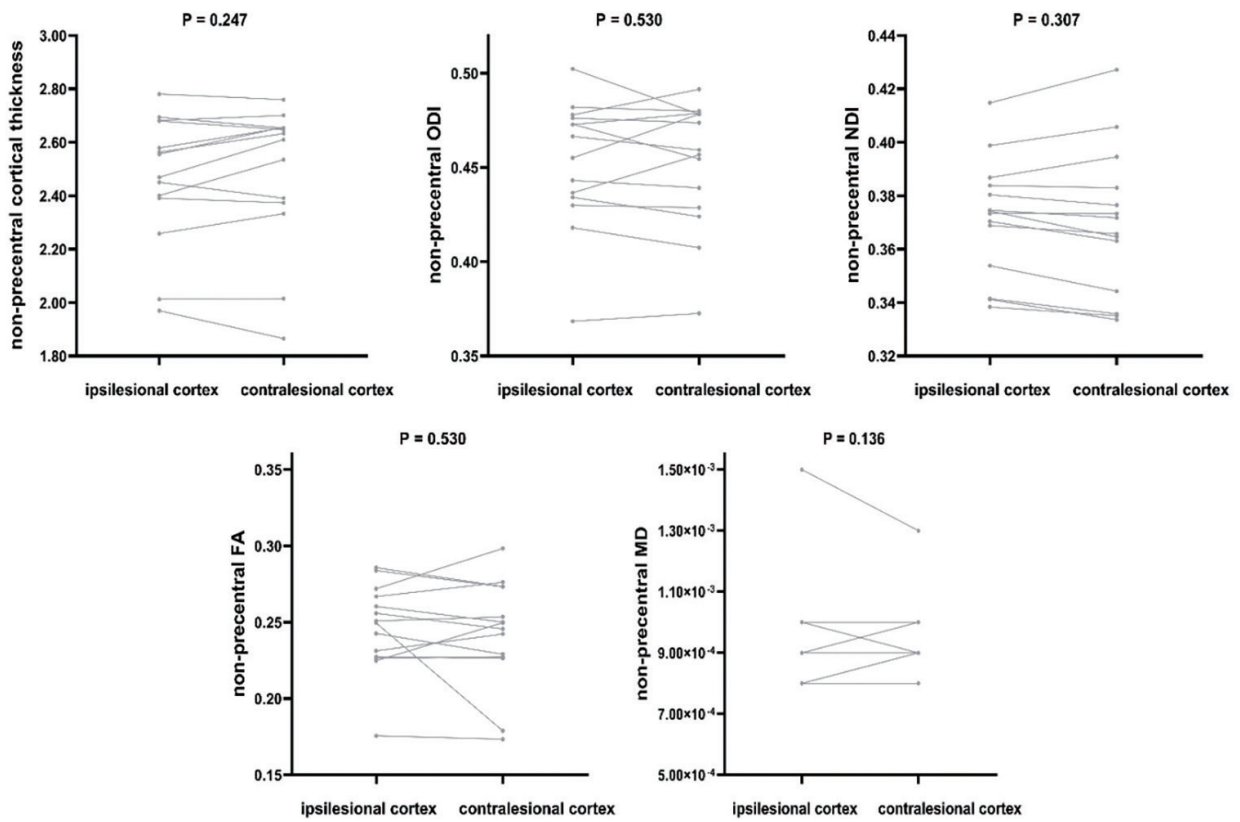


Figure S1 Comparison of cortical thickness, NDI, ODI, FA, and MD between ipsilesional cortex and contralesional cortex in non-precentral patients. The P value was resulted from paired t-test. NDI, neurite density index; ODI, orientation dispersion index; FA, fractional anisotropy; MD, mean diffusivity.

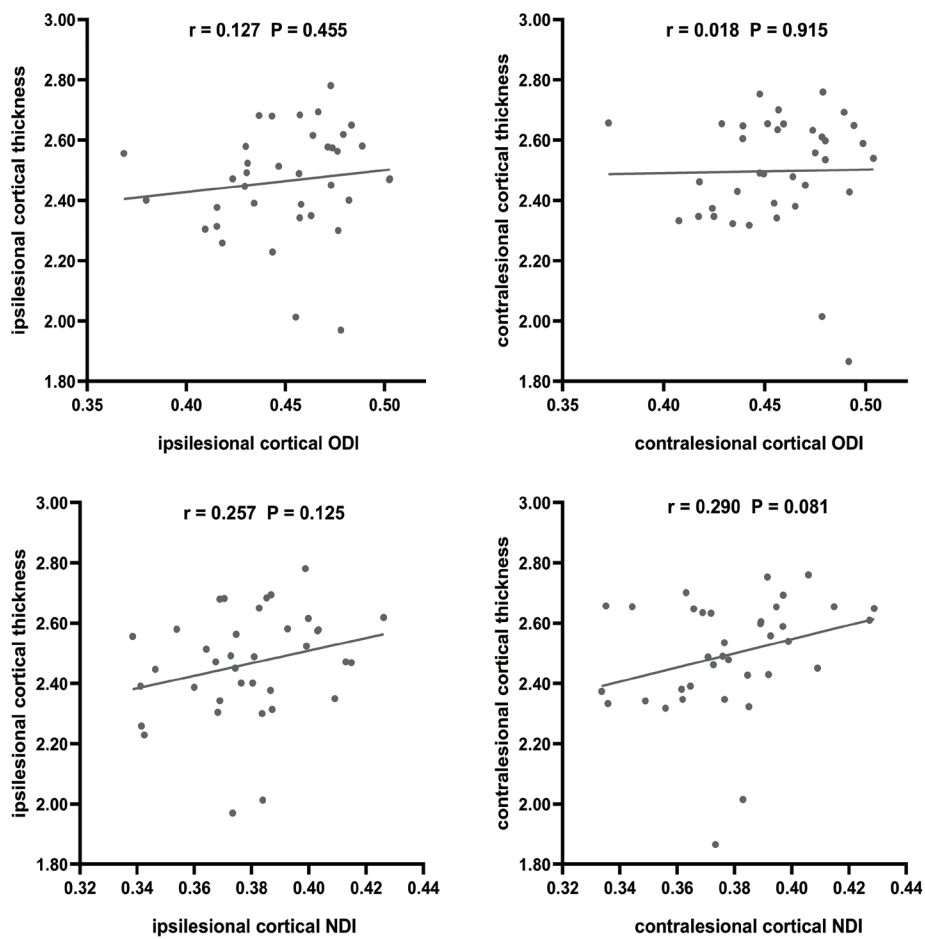


Figure S2 Correlations between NODDI metrics (NDI and ODI) and cortical thickness in all patients. The P value was resulted from Pearson's correlation test. NDI, neurite density index; ODI, orientation dispersion index.