

Table S6

Multivariable linear regression analysis in chronic kidney disease (CKD) participants (N=82) to explore the relationship between estimated glomerular filtration rate (eGFR) and brain region of interest (ROI) volume, adjusted for age, sex, race, prematurity, hematocrit, and whether the participant started renal replacement therapy (RRT) at age ≤ 5 years.

Region of interest	Difference in normalized ROI volume (mm ^{3*}) per 10 mL/min/1.73m ² higher eGFR		P	Q [#]
	Parameter estimate	95% Confidence Interval		
Whole brain GM	140.5	-22.5, 503.5	0.4	0.9
Whole brain WM	-162.6	-327.5, 2.2	0.05	0.5
Cortex GM	95.7	-254.0, 445.4	0.6	0.9
Frontal GM, total	-5.3	-165.9, 155.3	0.9	0.9
Frontal GM, left	-7.6	-90.7, 75.4	0.9	0.9
Frontal GM, right	2.3	-77.4, 82.1	0.9	0.9
Frontal WM	-90.9	-175.5, -6.3	0.04	0.5
Temporal GM, left	18.7	-18.8, 56.2	0.3	0.8
Temporal GM, right	25.8	-14.8, 66.5	0.2	0.8
Parietal GM, left	9.8	-43.0, 62.6	0.7	0.9
Parietal GM, right	31.8	-20.4, 84.0	0.2	0.8
Occipital GM, left	-0.2	-31.8, 31.5	0.9	0.9
Occipital GM, right	-6.7	-39.7, 26.2	0.7	0.9
Limbic GM, left	12.0	-6.7, 30.9	0.2	0.8
Limbic GM, right	9.7	-7.9, 27.3	0.3	0.8
Amygdala	0.06	-2.3, 2.4	0.9	0.9
Hippocampus	-2.0	-8.8, 4.7	0.6	0.9
Thalamus Proper	0.1	-9.9, 10.2	0.9	0.9
Lateral Ventricles	5.3	-50.2, 60.8	0.8	0.9

*ROI volumes calculated in cubic millimeters (mm³). Raw ROI volumes normalized for intracranial volume (ICV) by dividing ROI volume by ICV, then multiplying by a constant of 1,500,000 mm³ (which represents the approximate average ICV) to scale to a larger value.

[#]False discovery rate-adjusted P values

GM: Gray matter; WM: White matter