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Effect of Kidney Dysfunction on Cortical Thinning in Patients with Probable Alzheimer's Disease Dementia

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Supplementary Table 1
Comparison of characteristics between included and excluded patients

	Included patients	Excluded patients	*p*-value
n	162	38	
Mean (±SD) age, years	73.1 ± 8.7	70.3 ± 8.3	0.071
Gender: female, *n* (%)	99 (61.1%)	26 (68.4%)	0.402
Mean (±SD) education, years	8.4 ± 5.4	8.3 ± 5.6	0.941
Hypertension, *n* (%)	60 (37.0%)	18 (47.3%)	0.240
Diabetes, *n* (%)	22 (13.6%)	4 (10.5%)	0.614
Hyperlipidemia, *n* (%)	20 (12.3%)	7 (18.4%)	0.324
Coronary heart disease, *n* (%)	20 (12.3%)	2 (5.3%)	0.209
Mean (±SD) MMSE	18.9 ± 5.5	16.6 ± 6.6	0.024
Mean (±SD) ICV (mm^3)	1291170 ± 126386	1300710 ± 135268	0.782
Mean (±SD) cortical thickness			
Total	3.16 ± 0.16	3.13 ± 0.17	0.342
Frontal	3.26 ± 0.16	3.24 ± 0.16	0.677
Parietal	3.01 ± 0.17	3.00 ± 0.22	0.176
Temporal	3.25 ± 0.19	3.22 ± 0.19	0.495
Occipital	2.90 ± 0.18	2.85 ± 0.23	0.205
Mean (±SD) WMH volume (mm^3)	5342.7 ± 7297.0	5332.2 ± 7802.8	0.994
Mean (±SD), number of lacunes	2.3 ± 2.8	2.0 ± 2.7	0.036

MMSE, Mini-Mental Status Examination; ICV, intracranial volume; WMH, white matter hyperintensities; SD, standard deviation; *n*, number.

Supplementary Table 2
The association between glomerular filtration rate (GFR) and small vessel disease (SVD) MRI markers

	WMH volume (mm^3)		Total lacunes	
	B(SE)	*p*-value	B(SE)	*p*-value
GFR	14.194 (33.190)	0.679	–0.001 (0.019)	0.977

B(SE) = beta coefficient(standard error). Multiple linear regression was performed after controlling for age, gender, the history of hypertension, diabetes mellitus, hyperlipidemia, ischemic heart disease, and body mass index.

Supplementary Table 3
The association between glomerular filtration rate (GFR) as continuous variable and mean cortical thickness of each lobe

	Frontal lobe				Parietal lobe				Temporal lobe				Occipital lobe			
	Model 1†		Model 2‡		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	B(SE)	*p*-value	B(SE)	*p*-value	B(SE)	*p*-value	B(SE)	*p*-value	B(SE)	*p*-value	B(SE)	*p*-value	B(SE)	*p*-value	B(SE)	*p*-value
GFR*	0.01 (0.01)	0.198	0.01 (0.01)	0.181	0.02 (0.01)	0.016	0.02 (0.01)	0.015	0.02 (0.01)	0.051	0.02 (0.01)	0.047	0.02 (0.01)	0.053	0.02 (0.01)	0.052

*ml/min/1.73 m^2, B(SE), beta coefficient(standard error). †Model 1: Multiple linear regression was performed after controlling for age, gender, the history of hypertension, diabetes mellitus, hyperlipidemia, ischemic heart disease, and body mass index. ‡Model 2: Multiple linear regression was performed after controlling for age, gender, the history of hypertension, diabetes mellitus, hyperlipidemia, ischemic heart disease, body mass index, white matter hyperintensities volume, and the number of lacunes.