

Renal Function and Long-term Decline in Cognitive Function: The Baltimore Longitudinal Study of Aging

Supplementary Table 1. Number of administrations of each neurocognitive test

Test	N	Median No. of			N(%) with ≥ 2 test administrations
		Administrations	Min	Max	
Benton Visual Retention Test	2116	5	1	10	1030 (48.7%)
Digit Span Test	1082	4	1	7	578 (53.4%)
California Verbal Learning Test	1017	4	1	7	550 (54.1%)
Letter & Category Fluency	748	4	1	7	415 (55.2%)
Trail Making Test	744	4	1	7	411 (55.2%)
Boston Naming Test	649	4	1	7	387 (59.6%)

Supplemental Table 2. Coefficients from mixed-effects regression models relating change in 1/Scr with change in cognitive function, adjusting for creatinine assay type.

	Test Score	Age	Age*1/Scr ¹	Age*Sex*1/Scr ²
Benton Visual Retention Test	# errors	1.612**	-0.511**	-0.165**
Boston Naming Test	# correct	-1.298	0.476	
CVLT Learning Slope	Mean # of new words per trial	-0.169**	0.108*	
CVLT Free recall, short delay	# correct	-1.203**	0.348	
CVLT Free recall, long delay	# correct	-1.160**	0.431	
Digit Span Test, forward	# correct	-0.248	-0.020	
Digit Span Test, backward	# correct	-0.251	-0.033	
Category Fluency	# correct	-1.783**	0.275	
Letter Fluency	# correct	-0.712	0.188	
Trail-Making Test, Part A	Time to completion	6.299*	0.986	
Trail-Making Test, Part B	Time to completion	19.693*	6.679	

* p<.05; ** p<.01; CVLT = California Verbal Learning Test; SCr = Serum creatinine concentration. -

1. Test of the association of 1/SCr with change in score on cognitive test.
2. Test of the interaction between 1/SCr and sex on change in cognitive test score; where blank, no significant (p<.05) interaction detected.

Supplemental Table 3. Coefficients from mixed-effects regression models relating change in 1/Scr with change in cognitive function, excluding those with CVD and initial eGFR<60 cc/min/1.73m²

	Test Score	Age	Age*1/SCr ¹	Age*Sex*1/Scr ²
Benton Visual Retention Test	# errors	1.550**	-0.475**	-0.172**
Boston Naming Test	# correct	-1.092	0.374	
CVLT Learning Slope	Mean # of new words per trial	-0.163**	0.109*	
CVLT Free recall, short delay	# correct	-1.204**	0.309	
CVLT Free recall, long delay	# correct	-1.243**	0.431	
Digit Span Test, forward	# correct	-0.232	-0.028	
Digit Span Test, backward	# correct	-0.283	-0.014	
Category Fluency	# correct	-1.916**	0.430	
Letter Fluency	# correct	0.163	-0.433	
Trail-Making Test, Part A	Time to completion	3.88	2.17	
Trail-Making Test, Part B	Time to completion	24.3*	2.35	-8.95*

* p<.05; ** p<.01; CVLT = California Verbal Learning Test; SCr = Serum creatinine concentration. -

1. Test of the association of 1/SCr with change in score on cognitive test.
2. Test of the interaction between 1/SCr and sex on change in cognitive test score; where blank, no significant (p<.05) interaction detected.