Appendix

Supplementary table 1. Neuropsychological test scores

	NPA	Group 1	Group 2	Group 3
Executive function				
Brixton Spatial	1	41.33 (5.50)	35.78 (5.12)	41.38 (4.60)
Anticipation Test	2	42.29 (6.58)	39.56 (3.54)	43.22 (5.02)
	3	43.11 (5.42)	38.00 (6.84)	42.00 (5.87)
Letter Fluency	1	29.40 (8.58)	33.44 (7.42)	32.44 (11.96)
	2	34.40 (11.63)	35.67 (10.38)	41.44 (12.08)
	3	37.70 (11.62)	42.56 (9.76)	45.11 (11.25)
Category Fluency	1	24.50 (4.72)	23.89 (7.82)	23.56 (5.73)
	2	20.30 (3.80)	16.00 (2.83)	16.11 (3.02)
	3	24.50 (6.70)	23.56 (7.55)	27.33 (4.12)
Memory				
Working memory				
Digit Span (WAIS-IV)	1	18.38 (2.39)	20.63 (2.56)	18.78 (1.64)
	2	19.88 (3.04)	20.00 (2.39)	20.13 (2.90)
	3	20.40 (2.91)	19.89 (3.37)	21.11 (3.41)
Letter-number sequencing	1	24.80 (4.57)	25.11 (4.70)	26.67 (4.33)
(WAIS-IV)	2	24.89 (4.37)	26.67 (4.33)	27.22 (5.72)
	3	26.20 (3.49)	27.22 (5.02)	26.56 (3.54)
Verbal memory				
RAVLT total score	1	36.60 (12.95)	37.78 (8.50)	37.56 (6.97)
	2	41.00 (10.71)	40.33 (5.36)	44.00 (10.40)
	3	39.40 (14.31)	44.89 (10.51)	45.89 (10.11)
RAVLT delayed recall	1	5.90 (3.76)	5.78 (3.07)	7.78 (3.60)
	2	9.00 (3.07)	7.44 (1.59)	8.33 (3.74)
	3	7.60 (4.09)	8.44 (3.17)	9.44 (3.05)
RAVLT delayed recognition	1	26.90 (2.08)	26.44 (2.51)	27.67 (2.29)
	2	27.86 (3.19)	27.67 (1.50)	28.00 (2.78)
	3	26.80 (3.08)	28.00 (1.87)	28.56 (1.42)
RBMT Story immediate	1	8.15 (4.18)	6.56 (2.16)	7.28 (4.12)
recall	2	10.50 (2.90)	8.06 (2.11)	9.06 (2.64)
	3	9.20 (3.42)	8.89 (3.33)	9.67 (3.84)
RBMT Story delayed recall	1	5.85 (4.47)	4.83 (2.06)	6.22 (4.04)
	2	9.33 (3.46)	6.81 (2.17)	8.11 (2.89)
	3	7.90 (4.03)	7.22 (2.92)	8.28 (3.85)
Abstract reasoning				
Raven	1	9.56 (2.01)	8.44 (2.60)	8.44 (2.30)
	2	9.33 (1.41)	8.44 (2.60)	8.67 (2.55)
	3	8.90 (3.07)	8.44 (1.51)	7.67 (2.24)
Attention & oncentration				
TAP Flexibility alternating,	1	829.57 (162.61)	1071.63 (513.09)	813.33 (139.52)
median speed[a]	2	789.86 (197.50)	833.11 (342.33)	761.57 (195.96)
	3	763.30 (169.29)	849.89 (446.04)	725.56 (195.81)
TAP Flexibility TPI	1	1.01 (7.80)	-1.68 (17.44)	4.48 (12.19)
	2	0.30 (11.04)	6.68 (13.67)	6.06 (12.43)
	3	4.48 (8.31)	7.31 (16.26)	7.07 (13.42)
D2 TN-F	1	374.30 (79.09)	378.67 (125.07)	394.44 (64.25)
	2	441.43 (65.86)	405.33 (108.23)	442.00 (63.25)
	3	459.10 (62.00)	404.11 (121.46)	461.78 (82.46)
Stroop part III[a]	1	109.20 (22.79)	101.67 (29.19)	97.67 (12.79)
	2	96.56 (23.82)	97.56 (32.06)	92.11 (12.79)
	3	88.90 (22.14)	100.00 (35.45)	89.44 (11.46)

Supplementary table 1 (continued). Neuropsychological test scores

Information processing speed				
Stroop part I and II[a]	1	109.50 (23.53)	109.67 (19.82)	109.22 (12.99)
	2	110.56 (22.20)	111.11 (17.94)	108.56 (11.59)
	3	103.60 (21.28)	108.22 (17.94)	106.22 (11.50)
TAP - alertness, median speed[a]	1	286 (60.51)	255.88 (30.14)	276.50 (52.16)
	2	265.43 (51.36)	250.38 (28.05)	246.43 (37.66)
	3	358.78 (47.10)	264 (64.97)	253.22 (44.13)
TAP - flexibility (letters and numbers), median speed[a]	1	1008.63 (120.70)	1065.25 (204.50)	1033.22 (152.72)
	2	963.14 (154.43)	1016.67 (156.11)	962.50 (161.20)
	3	905.33 (130.11)	1000.56 (170.14)	932.89 (107.85)
ASTM	1	43.80 (1.23)	44.00 (.87)	43.38 (1.85)
	2	44.10 (1.10)	44.11 (1.05)	43.14 (1.35)
	3	43.56 (1.51)	43.67 (.87)	43.00 (1.87)

Raw neuropsychological test scores (mean + SD) for transplant patients, dialysis patients, and CKD patients.

[a] Higher test scores reflect worse performance

Abbreviations*: WAIS-IV* Wechsler Adult Intelligence Scale–Fourth Edition, *RAVLT* Rey Auditory Verbal Learning Test, *RBMT* Rivermead Behavioural Memory Test, *TAP* Test for Attentional Processing, *TPI* Total Performance Index, *D2 TN-F* D2-test of attention**,** *ASTM* Amsterdam Short-Term Memory Test.