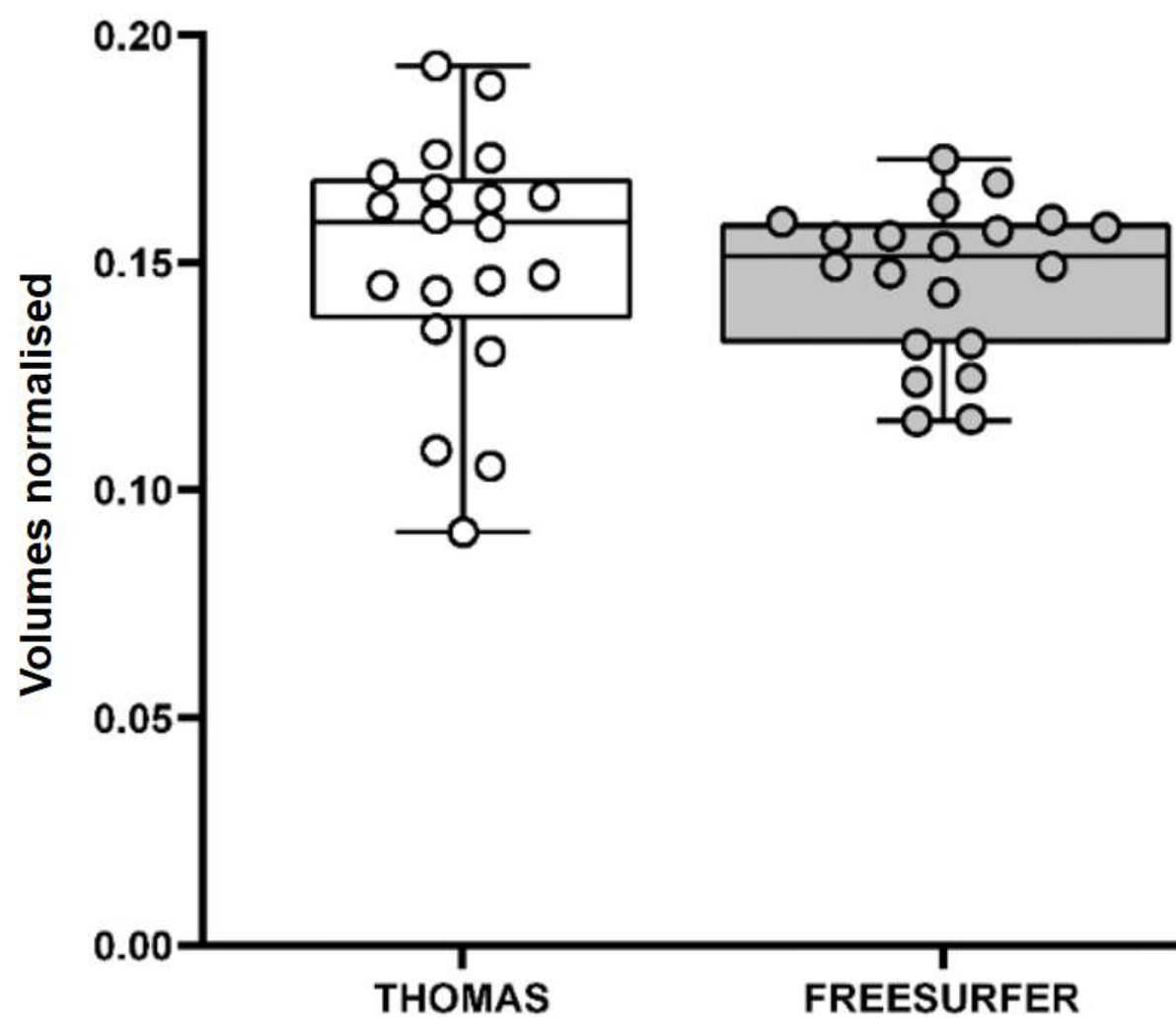
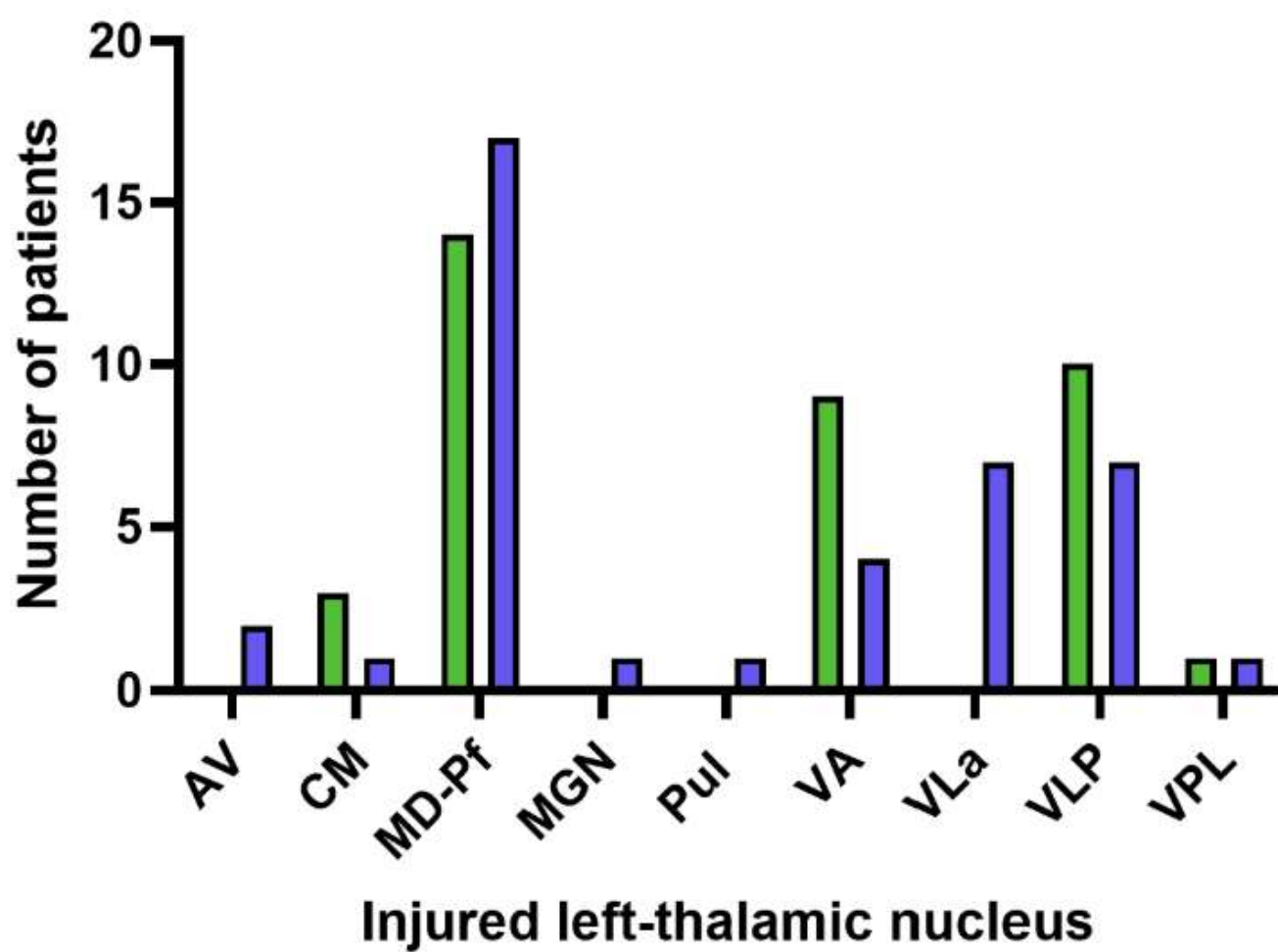


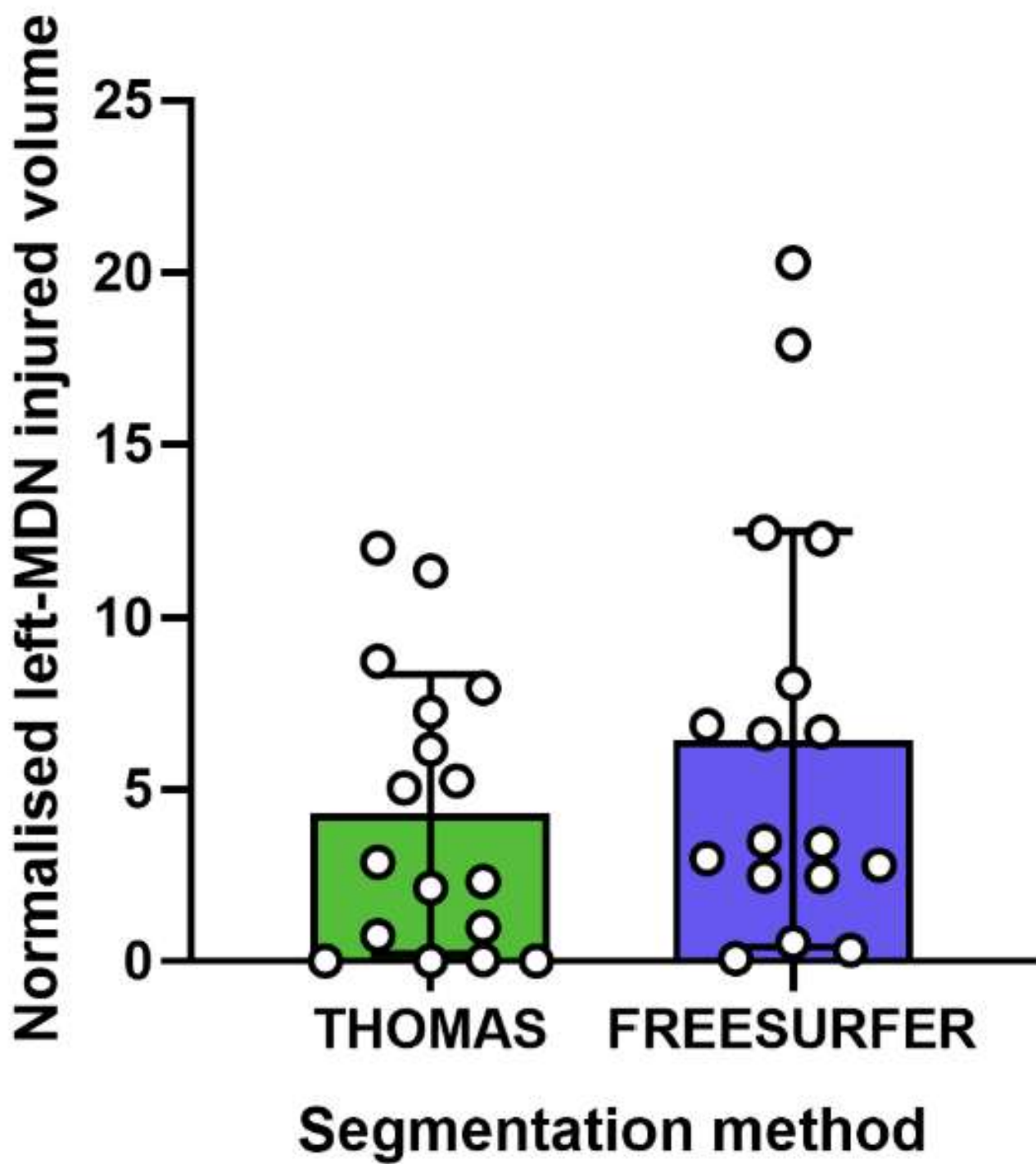
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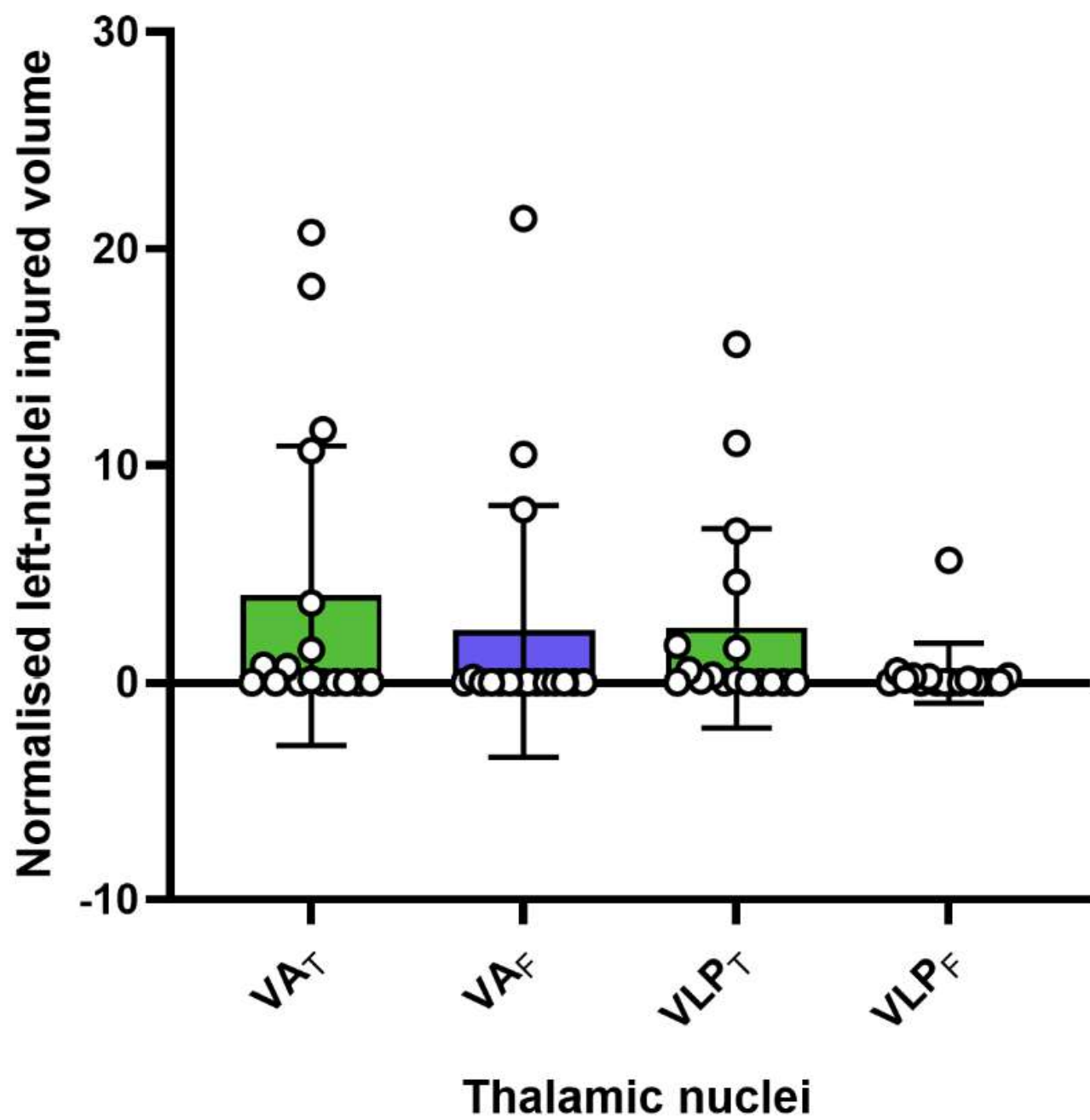


Table 1. Median [min/max] of standard cognitive assessment measures in controls-patients' comparisons

Cognitive function	Test	Measure	Median [min/max]			P-value uncorrected		P-value corrected	
			T ^a	F ^b	C ^c	T	F	T	F
Language	Phonologic Fluency Task	Score	20 [4/36]	19 [4/36]	24 [10/39]	0.85	0.41	1.00	1.00
		Score SD	-0.5 [-2.9/1.7]	-0.6 [-2.9/1.7]	0 [-2.2/2.3]	0.68	0.32	1.00	1.00
	Semantical Fluency Task	Score	37 [12/42]	35 [12/42]	37 [11/50]	0.47	0.17	1.00	1.00
		Score SD	0.3 [-2.8/1.6]	-0.2 [-2.6/1.6]	0.6 [-3.0/2.3]	0.48	0.18	1.00	1.00
	Oral Denomination Task	Score / 36	35 [33/36]	34 [33/36]	36 [31/36]	0.03	0.01	0.64	0.22
		Time (s)	76 [52/103]	76 [52/103]	61 [48/111]	0.42	0.26	1.00	1.00
	Semantic Judgment Task	Score / 18	18 [16/18]	18 [16/18]	18 [16/18]	0.28	0.41	1.00	1.00
		Time (s)	132 [98/199]	138 [98/199]	107 [80/221]	0.01	0.002	0.13	0.04
	Semantic Generation Task	Score / 40	35 [31/40]	35 [31/40]	37 [14/40]	0.30	0.20	1.00	1.00
		Time (s)	156 [112/195]	165 [112/244]	134 [94/264]	0.17	0.11	1.00	1.00
Attention	TAP – Phasic Alertness	Time (not warned, s)	267 [220/1303]	267 [220/1303]	237 [199/485]	0.20	0.22	1.00	1.00
		False alerts (not warned, s)	1 [0/3]	1 [0/3]	1 [0/3]	0.09	0.14	0.98	1.00
		Time (warned, s)	252 [216/1410]	252 [216/1410]	244 [198/470]	0.16	0.19	1.00	1.00
		False alerts (warned)	1 [0/3]	1 [0/8]	2 [0/4]	0.43	0.17	1.00	1.00
	TAP – Divided Attention	Audio time (s)	597 [411/789]	593 [411/789]	582 [308/677]	0.28	0.39	1.00	1.00
		Visual time (s)	787 [597/1052]	793 [597/1052]	742 [617/978]	0.29	0.24	1.00	1.00
		Missed	1 [0/10]	1 [0/10]	1 [0/11]	0.27	0.14	1.00	1.00
		False alerts	1 [0/8]	1 [0/8]	2 [0/7]	0.73	0.47	1.00	1.00
	d2 Test of Attention	Speed score	425 [278/602]	423 [278/602]	495 [220/629]	0.21	0.12	1.00	1.00
		Quality score	411 [277/514]	410 [277/514]	487 [207/623]	0.11	0.05	1.00	0.64
		Reability score	164 [119/213]	161 [119/213]	190 [85/278]	0.06	0.03	0.82	0.42
		Regulatory score	14 [6/24]	14 [6/24]	11 [5/22]	0.18	0.17	1.00	1.00

Cognitive function	Test	Measure	Median [min/max]			P-value uncorrected		P-value corrected	
			T ^a	F ^b	C ^c	T	F	T	F
Anterograde memory	DMS-48	Set 1 score	48 [42/48]	47 [35/48]	46 [41/48]	0.15	0.45	1.00	1.00
		Set 1 time (s)	122 [98/242]	133 [98/364]	116 [85/177]	0.39	0.16	1.00	1.00
		Set 2 score	47 [42/48]	46 [28/48]	46 [38/48]	0.30	0.57	1.00	1.00
		Set 2 time (s)	132 [95/252]	133 [95/252]	114 [85/158]	0.08	0.04	1.00	0.72
	RLRI-16	Immediate recall	16 [12/16]	16 [11/16]	16 [15/16]	0.21	0.08	1.00	1.00
		Total free recall	36 [7/43]	36 [7/43]	37 [26/45]	0.61	0.18	1.00	1.00
		Total cued recall	47 [13/48]	46 [14/48]	47 [42/48]	0.98	0.43	1.00	1.00
		Delayed free recall	14 [1/16]	14 [1/16]	14 [10/16]	0.59	0.19	1.00	1.00
		Delayed total cued + free recall	16 [5/16]	16 [5/16]	16 [5/16]	0.38	0.15	1.00	1.00
		Recognition	16 [11/16]	16 [11/16]	16 [15/16]	0.17	0.12	1.00	1.00
Executive functions	Digit Span (WAIS, WMS)	Upright	6 [4/8]	6 [4/8]	7 [4/8]	0.61	0.75	1.00	1.00
		Inverted	5 [3/7]	9 [7/12]	5 [3/8]	0.97	0.60	1.00	1.00
	Corsi Block-Tapping Test	Upright	9 [7/12]	9 [7/12]	9 [6/11]	0.52	0.43	1.00	1.00
		Inverted	8 [5/13]	8 [5/13]	9 [6/11]	0.43	0.17	1.00	1.00
	Brown-Peterson Task	0" score	100 [100/100]	100 [100/100]	100 [100/100]	1.00	1.00	0.64	0.22
		0" score SD	0.3 [0.2/0.4]	0.3 [0.2/0.4]	0.3 [0.1/0.4]	0.53	0.67	1.00	1.00
		5" score	83 [16/100]	83 [16/100]	100 [66/100]	0.04	0.045	1.00	1.00
		5" score SD	-0.5 [-5.5/0.7]	-0.5 [-5.5/0.8]	0.8 [-1.7/0.9]	0.004	0.01	0.13	0.04
		10" score	50 [0/100]	66 [0/100]	83 [16/100]	0.06	0.06	1.00	1.00
		10" score SD	-1.5 [-4.1/0.9]	-0.7 [-4.1/0.9]	-0.02 [-2.2/1.2]	0.19	0.20	1.00	1.00
		20" score	58 [0/83]	50 [0/83]	92[16/100]	0.01	0.004	1.00	1.00
		20" score SD	-1.0 [-2.8/0.5]	-1.0 [-2.8/0.5]	0.02 [-2.7/1.0]	0.02	0.01	1.00	1.00
	PASAT-4	Score / 60	9 [7/12]	9 [7/12]	9 [6/11]	0.52	0.43	1.00	1.00
		Telescoping	8 [5/13]	8 [5/13]	9 [6/11]	0.43	0.17	1.00	1.00
		Calculation mistakes	100 [100/100]	100 [100/100]	100 [100/100]	1.00	1.00	1.00	1.00
		No response	0.3 [0.2/0.4]	0.3 [0.2/0.4]	0.3 [0.1/0.4]	0.53	0.67	1.00	1.00

Cognitive function	Test	Measure	Median [min/max]			P-value uncorrected		P-value corrected	
			T ^a	F ^b	C ^c	T	F	T	F
Executive functions	Wisconsin Card Sorting Test (WCST)	Criteria / 6	6 [5/6]	6 [5/6]	6 [0/6]	0.22	0.15	1.00	1.00
		Errors	5 [0/15]	4 [0/15]	4 [0/37]	0.88	0.93	1.00	1.00
	Trail Making Test (TMT)	Time A (s)	777 [456/1983]	779 [456/1983]	619 [439/1422]	0.11	0.07	1.00	1.00
		False alerts A	1 [0/3]	1 [0/3]	1 [0/2]	0.10	0.27	1.00	1.00
		Time B (s)	832 [456/2037]	841 [459/2037]	678 [467/1295]	0.05	0.04	1.00	0.74
		False alerts B	4 [0/8]	3 [0/8]	1 [0/5]	0.02	0.04	0.35	0.78
		Mean time (s)	812 [459/2037]	814 [459/2037]	663 [475/1355]	0.09	0.06	1.00	0.97
		Mean false alerts	3 [0/12]	1 [0/12]	0 [0/4]	0.05	0.10	1.00	1.00
	Brixton	Time (s)	169 [120/208]	177 [120/282]	145 [99/217]	0.25	0.07	1.00	0.65
		Errors	12 [5/18]	13 [5/18]	9 [5/22]	0.71	0.40	1.00	1.00
	Stroop Color and Word Test (SCWT)	Time P1 (s)	113 [69/257]	123 [69/257]	101 [70/160]	0.40	0.75	1.00	1.00
		Uncorrected mistakes P1	0 [0/1]	0 [0/1]	0 [0/4]	0.85	0.60	1.00	1.00
		Time P2 (s)	43 [18/99]	58 [18/110]	35 [11/74]	0.17	0.43	1.00	1.00
		Uncorrected mistakes P2	0 [0/1]	0 [0/1]	0 [0/4]	0.39	0.12	1.00	1.00
	Hayling	Errors	1 [1/15]	1 [1/15]	5 [1/8]	0.70	0.55	1.00	1.00
		Time (s)	136 [98/210]	142 [98/210]	115 [82/221]<	0.53	0.67	1.00	1.00
	Digit Symbol Substitution Test (DSST-WAIS)	Score	65 [44/83]	64 [44/83]	74 [36/94]	0.04	0.02	0.92	0.35
Questionnaires	Spielberger State-Trait Anxiety Inventory (STAI)	Score / 80	37 [13/59]	37 [13/59]	41 [26/51]	0.23	0.25	0.92	1.00
	Starkstein Apathy Scale	Score / 42	8 [1/24]	8 [1/24]	8 [0/18]	0.73	0.83	1.00	1.00
	Beck Depression Inventory (BDI-II)	Score / 39	3 [0/15]	3 [0/15]	1 [0/6]	0.05	0.07	0.36	0.51
		Inhibition / 28	7 [3/13]	7 [3/13]	9 [4/16]	0.02	0.03	0.14	0.23
		Intentionality / 20	5 [1/13]	5 [1/13]	7 [2/13]	0.12	0.22	0.70	1.00
		Executive memory / 12	2 [0/6]	2 [0/6]	3 [0/6]	0.54	0.53	1.00	1.00
	Dysexecutive Questionnaire (DEX)	Positive affects / 12	3 [1/7]	3 [1/9]	3 [1/7]	0.71	0.99	1.00	1.00
		Negative affects / 8	3 [0/6]	2 [0/6]	2 [0/4]	0.18	0.21	0.91	1.00
		Total score / 80	18 [11/42]	20 [11/42]	26 [13/35]	0.03	0.06	0.24	0.51

^aT stands for subgroup T.
^bF stands for subgroup F.
^cC stands for control group.
^dSD stands for standard deviation.

Table 2. Median [min/max] of multitasking measures in control-patients' comparisons

Section	Measure	Median [min/max]			P-value uncorrected		P-value corrected	
		T ^a	F ^b	C ^c	T	F	T	F
Global measures	Performance by ranks	4 [2/6]	4 [2/6]	6 [2/6]	0.006	0.005	0.084	0.075
	Performance by points	705 [542/1034]	705 [542/1034]	1006 [555/1074]	0.004	0.005	0.06	0.08
	Time-out (s)	60 [0/402]	60 [0/402]	0 [0/60]	< 0.001	< 0.001	0.002	0.002
	Itineraries A time (s)	52 [0/168]	50 [0/210]	45 [0/110]	0.58	0.73	1.00	1.00
	Itineraries A score	185 [0/185]	185 [0/185]	185 [0/185]	0.20	0.14	1.00	1.00
	Itineraries B time (s)	34 [0/153]	17 [0/153]	39 [0/115]	0.57	0.23	1.00	1.00
	Itineraries B score	0 [0/185]	0 [0/185]	185 [0/185]	0.007	0.009	0.09	0.12
	Denominations A time (s)	201 [88/405]	203 [88/405]	198 [119/358]	0.83	0.86	0.13	0.04
	Denominations A score	172 [120/185]	169 [120/185]	172 [114/185]	0.66	0.83	1.00	1.00
	Denominations B time (s)	133 [0/223]	146 [0/223]	178 [0/285]	0.22	0.28	1.00	1.00
	Denominations B score	150 [0/185]	157 [0/185]	157 [0/185]	0.24	0.27	1.00	1.00
	Calculations A time (s)	265 [120/552]	260 [120/552]	223 [116/587]	0.12	0.16	1.00	1.00
	Calculations A score	160 [98/185]	159 [98/185]	163 [73/185]	0.69	0.54	1.00	1.00
	Calculations B time (s)	171 [0/435]	178 [0/435]	206 [0/350]	0.31	0.64	1.00	1.00
	Calculations B score	129 [0/185]	148 [0/185]	153 [0/181]	1.15	1.21	1.00	1.00
Number of answered items	Itineraries A	50 [0/50]	50 [0/50]	50 [0/50]	0.20	0.20	0.98	0.71
	Itineraries B	50 [0/50]	50 [0/50]	50 [0/50]	0.046	0.047	0.29	0.29
	Denominations A	42 [12/50]	34 [12/50]	37 [13/50]	0.55	0.77	1.00	1.00
	Denominations B	24 [0/50]	22 [0/50]	22 [0/50]	0.41	0.42	1.00	1.00
	Calculations A	26 [14/50]	26 [14/50]	28 [10/50]	1.00	0.87	1.00	1.00
	Calculations B	14 [0/50]	15 [0/50]	18 [0/46]	0.24	0.34	0.98	1.00
	Total items	164 [103/255]	164 [96/255]	219 [133/264]	0.06	0.04	0.37	0.29

Section	Measure	Median [min/max]			P-value uncorrected		P-value corrected	
		T ^a	F ^b	C ^c	T	F	T	F
Part 1 (0-5')	Itinerary A time (s)	0 [0/47]	0 [0/47]	0 [0/92]	0.08	0.16	0.49	1.00
	Itinerary B time (s)	0 [0/0]	0 [0/17]	0 [0/80]	0.04	0.08	0.34	0.75
	Denomination A time (s)	147 [0/300]	123 [0/300]	112 [10/255]	0.30	0.32	1.00	1.00
	Denomination B time (s)	0 [0/75]	0 [0/75]	15 [0/181]	0.08	0.19	0.49	1.00
	Calculation A time (s)	113 [0/180]	75 [0/180]	83 [0/260]	0.68	0.95	1.00	1.00
	Calculation B time (s)	0 [0/120]	0 [0/120]	0 [0/105]	0.37	0.25	1.00	1.00
Part 2 (5-10')	Itinerary A time (s)	0 [0/58]	0 [0/200]	0 [0/60]	0.46	0.58	1.00	1.00
	Itinerary B time (s)	0 [0/62]	0 [0/62]	0 [0/55]	0.32	0.19	1.00	1.00
	Denomination A time (s)	0 [0/145]	0 [0/145]	22 [0/105]	0.49	0.52	1.00	1.00
	Denomination B time (s)	59 [0/160]	70 [0/160]	74 [0/285]	0.63	0.52	1.00	1.00
	Calculation A time (s)	129 [0/300]	117 [0/300]	60 [0/300]	0.12	0.08	1.00	0.68
	Calculation B time (s)	4 [0/300]	0 [0/300]	75 [0/300]	0.32	0.20	1.00	1.00
Part 3 (10-15')	Itinerary A time (s)	0 [0/168]	0 [0/168]	0 [0/58]	0.24	0.21	1.00	1.00
	Itinerary B time (s)	0 [0/123]	0 [0/123]	0 [0/115]	0.70	0.93	1.00	1.00
	Denomination A time (s)	0 [0/153]	0 [0/153]	0 [0/160]	0.11	0.09	1.00	0.94
	Denomination B time (s)	25 [0/209]	25 [0/209]	15 [0/185]	0.61	0.36	1.00	1.00
	Calculation A time (s)	30 [0/300]	30 [0/300]	61 [0/242]	1.00	0.77	1.00	1.00
	Calculation B time (s)	52 [0/275]	93 [0/275]	88 [0/220]	0.45	0.82	1.00	1.00

^aT stands for subgroup T.

^bF stands for subgroup F.

^cC stands for control group.

Table 3. Description of Cognitive Evaluation Tests

Cognitive function	Evaluated process	Associated test	Protocol	Reference
Language	Phonemic and semantic fluency	Phonemic and Semantic Fluency Tasks	Generate as many words as possible starting with a given letter or within a category in a set time	Godefroy O, 2008.
	Object naming	Oral Denomination Task	Name aloud pictures of objects or scenes	Bézy C, Renard N, Pariente J, 2016.
	Concept retrieval	Semantic Generation Task	Generate words or concepts related to a given theme or category	Péran P, Démonet JF, Pélégri-issac M, et al., 2004.
	Semantic verification	Semantic Judgment Task	Verify the semantic correctness of statements or word pairs	Bézy C, Renard N, Pariente J, 2016.
Attention	Phasic attention	TAP – Phasic Alertness	Respond as fast as possible to unpredictable stimuli	Zimmermann P, Fimm B, 1994.
	Divided attention	TAP – Divided Attention	React simultaneously and differentially to two stimuli	Zimmermann P, Fimm B, 1994.
	Selective attention	d2 Test of Attention	Cross out specific target symbols while ignoring distractors	Brickenkamp R, Zillmer E, 1998.
Anterograde memory	Visual recognition memory	Delayed Matching to Sample (DMS-48)	Look at a series of pictures and recognise them after a delay	Barbeau EJ, Didic M, Felician O, et al., 2004.
	Verbal episodic memory	RLRI-16	Learn and recall a list of words after a delay, with or without cues	Van der Linden M, Coyette F, Poitrenaud J, et al., 2004.
Executive functions	Audiovisual span	Digit Span (WAIS, WMS)	Repeat sequences of digits forward and backward	Wechsler D, 2001.
	Visuospatial span	Corsi Block-Tapping Test	Memorize and reproduce a sequence of blocks	Corsi PM, 1972.
	Interference	Brown-Peterson	Memorize a trigram while counting backwards	Lezak MD, 2004.
	Serial addition	PASAT-4	Add each new number to the previous one while listening to a series of numbers	Diehr MC, Heaton RK, Miller W, Grant I, 1998.
	Rules deduction	Wisconsin Card Sorting Test (WCST)	Match cards based on a changing rule that must be guessed	Godefroy O, 2008.
	Cognitive flexibility	Trail Making Test (TMT A & B)	A, ordering numbers; B, alternate between ordering numbers and ordering letters	Zimmermann P, Fimm B, 1994.
	Pattern recognition	Brixton Spatial Anticipation Test	Predict the next pattern in a sequence of cards showing randomly changing dot patterns	Godefroy O, 2008.
	Inhibitory control	Stroop Color and Word Test (SCWT)	Name the ink colour while ignoring the written word (P1 word = colour, P2 word ≠ colour)	Godefroy O, 2008.
	Verbal inhibition	Hayling Sentence Completion Test	Complete sentences first with an automatic word, then with an unrelated word	Godefroy O, 2008.
	Processing speed	Digit Symbol Substitution Test (DSST-WAIS)	Match symbols to numbers as quickly as possible	Wechsler D, 1997.
Questionnaires	Anxiety assessment	Spielberger State-Trait Anxiety Inventory (STAI)	Items related to temporary and general anxiety	Spielberger CD, 1983.
	Apathy evaluation	Starkstein Apathy Scale	Items related to apathy and motivation	Starkstein SE, Leentjens AF, 2008.
	Depression symptoms	Beck Depression Inventory (BDI-II)	Items related to depressive symptoms	Beck AT, Steer RA, Brown GK, 1988.
	Cognitive and behavioural complaints	Dysexecutive Questionnaire (DEX)	Items related to cognitive, emotional, and behavioural changes	Wilson BA, 1998.