

Table S1. Hierarchical Linear Regression: TEMPA as Outcome and SDMT as Measure of Cognitive Function^a

	R²		B (SE)	BCa 95% CI	β
Step 1	0.19	Constant	104.38 (32.43)	50.36, 160.29	
		Age (years)	-0.36 (0.66)	-1.71, 1.07	-0.02
		Employment status	10.42 (11.40)	-21.53, 34.67	0.03
		PDDS	32.05 (13.17)	12.75, 56.56	0.39
		Disease duration (years)	0.46 (1.87)	-3.72, 3.93	0.02
		VAS-P (past month)	-10.07 (6.10)	-26.18, 1.01	-0.17
		Right-eye visual impairment	150.86 (146.02)	-55.26, 500.21	0.15
		Step 2	0.24	Constant	105.44 (33.43)
Age (years)	-0.19 (0.67)			-1.59, 1.21	-0.01
Employment status	-2.78 (13.23)			-42.07, 22.08	-0.01
PDDS	23.67 (10.05)			8.51, 42.80	0.29
Disease duration (years)	0.28 (1.85)			-3.74, 3.82	0.01
VAS-P (past month)	-8.22 (5.38)			-22.74, 1.97	-0.14
Right-eye visual impairment	141.52 (145.96)			-62.49, 484.09	0.14
SDMT z-score	-35.47 (13.19)			-67.02, -12.86	-0.26 ^b
Step 3	0.25			Constant	117.48 (37.87)
		Age (years)	-0.28 (0.67)	-1.67, 1.13	-0.02
		Employment status	2.63 (11.66)	-30.01, 27.41	0.01
		PDDS	23.22 (9.78)	8.40, 41.03	0.28
		Disease duration (years)	0.09 (1.91)	-4.17, 3.78	0.00
		VAS-P (past month)	-5.89 (4.64)	-18.27, 4.27	-0.10
		Right-eye visual impairment	143.73 (147.09)	-62.14, 484.55	0.15
		SDMT z-score	-36.77 (13.68)	-69.72, -12.98	-0.27 ^b
		CES-D-10	-2.63 (2.15)	-7.72, 0.85	-0.09

Step 4	0.25	Constant	124.37 (36.88)	69.42, 188.80	
		Age (years)	-0.37 (0.67)	-1.76, 1.02	-0.02
		Employment status	8.02 (12.99)	-26.74, 37.74	0.02
		PDDS	26.27 (10.70)	9.36, 49.07	0.32
		Disease duration (years)	-0.03 (1.90)	-4.19, 3.54	-0.00
		VAS-P (past month)	-5.57 (4.68)	-18.20, 4.79	-0.10
		Right-eye visual impairment	146.50 (148.10)	-62.90, 493.30	0.15
		SDMT z-score	-37.17 (13.73)	-69.79, -13.23	-0.27 ^b
		CES-D-10	-1.60 (2.24)	-6.72, 2.51	-0.06
		MFIS-5	-2.97 (2.60)	-8.41, 1.42	-0.09

BCa 95% CI, bias corrected accelerated 95% confidence intervals; CES-D-10, Center for Epidemiologic Studies Depression Scale; MFIS-5, Modified Fatigue Impact Scale; PDDS, Patient-Determined Disease Steps; SDMT, Symbol Digit Modalities Test; TEMP, Test D'évaluation Des Membres Supérieurs de Personnes Âgées; VAS-P, Visual Analog Scale-Pain.

^aF(9, 216) = 7.78, $P < .001$

^b $P \leq .05$

Table S2. Hierarchical Linear Regression: FSI-A as Outcome and SDMT as Measure of Cognitive Function^a

	R²		B (SE B)	95% CI	β
Step 1	0.62	Constant	0.99 (0.15)	0.70, 1.28	
		Age (years)	-0.01 (0.00)	-0.02, -0.00	-0.15 ^c
		Employment status	0.19 (0.07)	0.05, 0.33	0.14 ^c
		PDDS	0.24 (0.02)	0.21, 0.28	0.75 ^c
		Disease duration (years)	0.00 (0.00)	-0.01, 0.01	0.02
		VAS-P (past month)	-0.01 (0.01)	-0.03, 0.01	-0.04
		Right-eye visual impairment	0.33 (0.17)	-0.00, 0.65	0.09
Step 2	0.64	Constant	0.99 (0.14)	0.71, 1.27	
		Age (years)	-0.01 (0.00)	-0.02, -0.00	-0.14 ^c
		Employment status	0.16 (0.07)	0.02, 0.29	0.12 ^b
		PDDS	0.22 (0.02)	0.18, 0.25	0.68 ^c
		Disease duration (years)	0.00 (0.00)	-0.01, 0.01	0.02
		VAS-P (past month)	-0.00 (0.01)	-0.02, 0.02	-0.01
		Right-eye visual impairment	0.30 (0.16)	-0.02, 0.62	0.08
		SDMT z-score	-0.09 (0.03)	-0.14, -0.04	-0.17 ^c
Step 3	0.64	Constant	0.99 (0.14)	0.70, 1.27	
		Age (years)	-0.01 (0.00)	-0.02, -0.00	-0.14 ^c
		Employment status	0.15 (0.07)	0.01, 0.29	0.11 ^b
		PDDS	0.22 (0.02)	0.18, 0.26	0.69 ^c
		Disease duration (years)	0.00 (0.00)	-0.01, 0.01	0.02
		VAS-P (past month)	-0.01 (0.01)	-0.03, 0.02	-0.02
		Right-eye visual impairment	0.30 (0.16)	-0.02, 0.62	0.08
		SDMT z-score	-0.09 (0.03)	-0.14, -0.04	-0.17 ^c

		CES-D-10	0.00 (0.01)	-0.01, 0.01	0.02
Step 4	0.64	Constant	0.98 (0.15)	0.70, 1.27	
		Age (years)	-0.01 (0.00)	-0.02, -0.00	-0.14 ^c
		Employment status	0.15 (0.07)	0.01, 0.29	0.11 ^b
		PDDS	0.22 (0.02)	0.18, 0.26	0.68 ^c
		Disease duration (years)	0.00 (0.00)	-0.01, 0.01	0.02
		VAS-P (past month)	-0.00 (0.01)	-0.03, 0.02	-0.02
		Right-eye visual impairment	0.30 (0.16)	-0.02, 0.62	0.08
		SDMT z-score	-0.09 (0.03)	-0.14, -0.04	-0.17 ^c
		CES-D-10	0.00 (0.01)	-0.01, 0.01	0.01
		MFIS-5	0.00 (0.01)	-0.02, 0.02	0.01

CES-D-10, Center for Epidemiologic Studies Depression Scale; FSI-A, Functional Status Index-Assistance; MFIS-5, Modified Fatigue Impact Scale; PDDS, Patient-Determined Disease Steps; SDMT, Symbol Digit Modalities Test; VAS-P, Visual Analog Scale-Pain.

^aF(9, 216) = 41.49, $P < .001$

^b $P < .05$

^c $P < .01$

Table S3. Hierarchical Linear Regression: FSI-A as Outcome and PS-C as Measure of Cognitive Function^a

	R²		B (SE)	BCa 95% CI	β
Step 1	0.62	Constant	0.99 (0.13)	0.72, 1.22	
		Age (years)	-0.01 (0.00)	-0.02, -0.00	-0.15 ^c
		Employment status	0.19 (0.07)	0.06, 0.31	0.14 ^c
		PDDS	0.24 (0.03)	0.19, 0.29	0.75 ^c
		Disease duration (years)	0.00 (0.00)	-0.01, 0.01	0.02
		VAS-P (past month)	-0.01 (0.01)	-0.04, 0.02	-0.04
		Right-eye visual impairment	0.33 (0.25)	-0.12, 0.88	0.09
		Step 2	0.63	Constant	0.99 (0.14)
Age (years)	-0.01 (0.00)			-0.02, -0.00	-0.14 ^b
Employment status	0.19 (0.07)			0.05, 0.31	0.14 ^b
PDDS	0.24 (0.03)			0.18, 0.29	0.75 ^c
Disease duration (years)	0.00 (0.00)			-0.01, 0.01	0.02
VAS-P (past month)	-0.01 (0.01)			-0.03, 0.02	-0.03
Right-eye visual impairment	0.34 (0.26)			-0.13, 0.91	0.09
PS-C (1)	-0.01 (0.09)			-0.19, 0.16	-0.01
PS-C (2)	-0.01 (0.09)			-0.19, 0.17	-0.01
PS-C (3)	-0.08 (0.09)			-0.26, 0.09	-0.05
PS-C (4)	0.15 (0.15)			-0.15, 0.46	0.05
PS-C (5)	-0.11 (0.16)			-0.44, 0.20	-0.03
Step 3	0.63			Constant	0.98 (0.14)
		Age (years)	-0.01 (0.00)	-0.02, -0.00	-0.14 ^b
		Employment status	0.19 (0.08)	0.05, 0.31	0.14 ^b
		PDDS	0.24 (0.03)	0.18, 0.29	0.74 ^c
		Disease duration (years)	0.00 (0.00)	-0.01, 0.01	0.03

		VAS-P (past month)	-0.01 (0.01)	-0.04, 0.02	-0.05
		Right-eye visual impairment	0.33 (0.25)	-0.13, 0.90	0.09
		PS-C (1)	-0.02 (0.09)	-0.20, 0.15	-0.01
		PS-C (2)	-0.03 (0.10)	-0.23, 0.18	-0.02
		PS-C (3)	-0.11 (0.11)	-0.30, 0.10	-0.06
		PS-C (4)	0.11 (0.16)	-0.20, 0.46	0.04
		PS-C (5)	-0.13 (0.16)	-0.44, 0.19	-0.03
		CES-D-10	0.00	0.00	0.04
Step 4	0.63	Constant	0.98 (0.14)	0.71, 1.23	
		Age (years)	-0.01 (0.00)	-0.12, -0.00	-0.14 ^b
		Employment status	0.18 (0.07)	0.04, 0.30	0.14 ^b
		PDDS	0.23 (0.03)	0.17, 0.29	0.71 ^c
		Disease duration (years)	0.00 (0.00)	-0.01, 0.01	0.03
		VAS-P (past month)	-0.01 (0.01)	-0.04, 0.02	-0.05
		Right-eye visual impairment	0.32 (0.25)	-0.13, 0.86	0.08
		PS-C (1)	-0.04 (0.10)	-0.23, 0.15	-0.03
		PS-C (2)	-0.08 (0.12)	-0.30, 0.18	-0.05
		PS-C (3)	-0.16 (0.13)	-0.42, 0.12	-0.10
		PS-C (4)	0.04 (0.19)	-0.33, 0.47	0.01
		PS-C (5)	-0.22 (0.19)	-0.56, 0.19	-0.06
		CES-D-10	0.00 (0.06)	-0.01, 0.02	0.02
		MFIS-5	0.01 (0.01)	-0.01, 0.03	0.07

BCa 95% CI, bias corrected accelerated 95% confidence intervals; CES-D-10, Center for Epidemiologic Studies Depression Scale; FSI-A, Functional Status Index-Assistance; MFIS-5, Modified Fatigue Impact Scale; PDDS, Patient-Determined Disease Steps; PS-C, Performance Scales-Cognition; VAS-P, Visual Analog Scale-Pain.

^aF(13, 216) = 26.40, $P < .001$

^b $P < .05$

^c $P < .01$

Table S4. Hierarchical Linear Regression: FSI-D as Outcome and SDMT as Measure of Cognitive Function^a

	R²		B (SE)	BCa 95% CI	β
Step 1	0.44	Constant	0.62 (0.16)	0.26, 0.89	
		Age (years)	-0.00 (0.00)	-0.01, 0.00	-0.07
		Employment status	0.12 (0.06)	0.00, 0.24	0.14 ^b
		PDDS	0.10 (0.02)	0.07, 0.14	0.52 ^c
		Disease duration (years)	-0.01 (0.00)	-0.01, 0.00	-0.10
		VAS-P (past month)	0.03 (0.01)	0.01, 0.05	0.22 ^c
		Ethnicity	0.21 (0.08)	0.06, 0.37	0.11 ^c
Step 2	0.45	Constant	0.59 (0.16)	0.24, 0.88	
		Age (years)	-0.00 (0.00)	-0.01, 0.00	-0.07
		Employment status	0.11 (0.06)	-0.01, 0.23	0.13
		PDDS	0.10 (0.02)	0.07, 0.13	0.48 ^c
		Disease duration (years)	-0.01 (0.00)	-0.01, 0.00	-0.10
		VAS-P (past month)	0.03 (0.01)	0.02, 0.05	0.23 ^c
		Ethnicity	0.22 (0.08)	0.07, 0.40	0.12 ^c
		SDMT z-score	-0.04 (0.03)	-0.09, 0.01	-0.12
Step 3	0.50	Constant	0.46 (0.18)	0.09, 0.75	
		Age (years)	-0.00 (0.00)	-0.01, 0.00	-0.06
		Employment status	0.07 (0.05)	-0.03, 0.18	0.09
		PDDS	0.10 (0.01)	0.07, 0.13	0.50 ^c
		Disease duration (years)	-0.00 (0.00)	-0.01, 0.00	-0.07
		VAS-P (past month)	0.02 (0.01)	0.00, 0.03	0.12
		Ethnicity	0.25 (0.09)	0.09, 0.43	0.14 ^c
		SDMT z-score	-0.03 (0.02)	-0.08, 0.02	-0.09
		CES-D-10	0.02 (0.00)	0.01, 0.03	0.26 ^c
Step 4	0.52	Constant	0.45 (0.17)	0.07, 0.76	
		Age	-0.00 (0.00)	-0.01, 0.00	-0.05

Employment status	0.04 (0.05)	-0.06, 0.15	0.05
PDDS	0.08 (0.02)	0.05, 0.12	0.42 ^c
Disease duration (years)	-0.00 (0.00)	-0.01, 0.00	-0.06
VAS-P (past month)	0.02 (0.01)	-0.00, 0.03	0.11
Ethnicity	0.24 (0.09)	0.08, 0.41	0.13 ^c
SDMT z-score	-0.03 (0.02)	-0.07, 0.02	-0.08
CES-D-10	0.01 (0.01)	0.00, 0.02	0.18 ^b
MFIS-5	0.02 (0.01)	0.00, 0.03	0.19 ^b

BCa 95% CI, bias corrected accelerated 95% confidence intervals; CES-D-10, Center for Epidemiologic Studies Depression Scale; FSI-D, Functional Status Index-Difficulty; MFIS-5, Modified Fatigue Impact Scale; PDDS, Patient-Determined Disease Steps; SDMT, Symbol Digit Modalities Test; VAS-P Visual Analog Scale-Pain.

^aF(9, 215) = 24.64, $P < .001$

^b $P < .05$

^c $P < .01$

Table S5. Hierarchical Linear Regression: FSI-D as Outcome and PS-C as Measure of Cognitive Function

	R²		B (SE)	BCa 95% CI	β
Step 1	0.44	Constant	0.62 (0.16)	0.26, 0.89	
		Age (years)	-0.00 (0.02)	-0.01, 0.00	-0.07
		Employment status	0.12 (0.06)	0.00, 0.24	0.14 ^b
		PDDS	0.10 (0.02)	0.07, 0.14	0.52 ^c
		Disease duration (years)	-0.01 (0.00)	-0.01, 0.00	-0.10
		VAS-P (past month)	0.03 (0.01)	0.01, 0.05	0.22 ^c
		Ethnicity	0.21 (0.08)	0.06, 0.37	0.11 ^c
Step 2	0.51	Constant	0.60 (0.16)	0.26, 0.88	
		Age (years)	-0.00 (0.00)	-0.01, 0.00	-0.02
		Employment status	0.05 (0.05)	-0.06, 0.15	0.06
		PDDS	0.11 (0.01)	0.08, 0.13	0.54 ^c
		Disease duration (years)	-0.00 (0.00)	-0.01, 0.00	-0.09
		VAS-P (past month)	0.02 (0.01)	0.01, 0.04	0.15 ^b
		Ethnicity	0.18 (0.08)	0.01, 0.35	0.10
		PS-C (1)	0.05 (0.05)	-0.04, 0.15	0.06
		PS-C (2)	0.13 (0.05)	0.04, 0.25	0.13 ^b
		PS-C (3)	0.15 (0.06)	0.04, 0.28	0.15 ^b
		PS-C (4)	0.50 (0.14)	0.24, 0.78	0.28 ^c
		PS-C (5)	0.31 (0.20)	-0.06, 0.71	0.13
Step 3	0.53	Constant	0.53 (0.17)	0.18, 0.84	
		Age (years)	-0.00 (0.00)	-0.01, 0.00	-0.02
		Employment status	0.04 (0.05)	-0.06, 0.14	0.04
		PDDS	0.11 (0.01)	0.08, 0.13	0.53 ^c
		Disease duration (years)	-0.00 (0.00)	-0.01, 0.00	-0.07
		VAS-P (past month)	0.01 (0.01)	-0.00, 0.03	0.09
		Ethnicity	0.20 (0.09)	0.02, 0.37	0.11 ^b
		PS-C (1)	0.03 (0.05)	-0.06, 0.12	0.03

		PS-C (2)	0.08 (0.06)	-0.03, 0.20	0.08
		PS-C (3)	0.08 (0.07)	-0.04, 0.23	0.08
		PS-C (4)	0.38 (0.14)	0.13, 0.66	0.22 ^c
		PS-C (5)	0.26 (0.20)	-0.10, 0.67	0.11
		CES-D-10	0.01 (0.01)	0.00, 0.02	0.19 ^b
Step 4	0.54	Constant	0.54 (0.17)	0.20, 0.84	
		Age (years)	-0.00 (0.00)	-0.01, 0.00	-0.02
		Employment status	0.03 (0.05)	-0.07, 0.13	0.03
		PDDS	0.09 (0.02)	0.06, 0.13	0.47 ^c
		Disease duration (years)	-0.00 (0.00)	-0.01, 0.00	-0.06
		VAS-P (past month)	0.01 (0.01)	-0.00, 0.03	0.09
		Ethnicity	0.19 (0.08)	0.03, 0.36	0.11 ^b
		PS-C (1)	-0.00 (0.05)	-0.11, 0.10	-0.00
		PS-C (2)	0.03 (0.07)	-0.09, 0.17	0.03
		PS-C (3)	0.01 (0.07)	-0.12, 0.18	0.01
		PS-C (4)	0.31 (0.14)	0.04, 0.61	0.18 ^b
		PS-C (5)	0.16 (0.20)	-0.19, 0.59	0.07
		CES-D-10	0.01 (0.01)	0.00, 0.02	0.16 ^b
		MFIS-5	0.01 (0.01)	-0.00, 0.02	0.13

BCa 95% CI, bias corrected accelerated 95% confidence intervals; CES-D-10, Center for Epidemiologic Studies Depression Scale; FSI-D, Functional Status Index-Difficulty; MFIS-5, Modified Fatigue Impact Scale; PDDS, Patient-Determined Disease Steps; PS-C, Performance Scales Cognition; VAS-P, Visual Analog Scale-Pain.

^a $F(13, 215) = 18.20, P < .001$

^b $P < .05$

^c $P < .01$