

**Supplementary Material S4.** Comparison between patients with and without Mild Cognitive Impairment (MCI).

Variable	PD-MCI (n= 82)	PD-NC (n= 101)	<i>F</i> / $\chi^2$	<i>p</i> -value	Adj. <i>p</i>
<i>Demographics</i>					
Age, years	66.60 ± 8.52	62.46 ± 8.67	10.48	0.001	<b>0.040</b>
Education, years	9.49 ± 4.35	13.76 ± 3.45	54.85	<0.001	<b>&lt;0.001</b>
Sex, male	44 (53.70%)	77 (76.20%)	10.30	0.001	<b>0.037</b>
<i>Clinical features</i>					
Disease duration, years	1.36 ± 0.75	1.58 ± 0.79	3.33	0.069	1.000
UPDRS-III	24.59 ± 9.28	19.37 ± 9.78	13.26	<0.001	<b>0.009</b>
Modified HY stage	1.88 ± 0.50	1.77 ± 0.55	1.92	0.168	1.000
Age at onset:					
Early-onset	2 (2.4%)	10 (9.9%)	4.11	0.043	1.000
Late-onset	33 (40.2%)	14 (13.9%)	16.50	<0.001	<b>0.001</b>
<i>Cognitive assessment</i>					
<i>Attention and working memory</i>					
TMT part A	43.22 ± 26.58	29.86 ± 12.81	19.62	<0.001	<b>&lt;0.001</b>
Digit span backward	3.59 ± 2.91	3.86 ± 0.81	0.79	0.373	1.000
<i>Executive functions</i>					
MCST-n. of categories	2.45 ± 1.58	5.26 ± 1.29	173.58	<0.001	<b>&lt;0.001</b>
Letter fluency task	24.61 ± 9.31	31.03 ± 9.23	21.45	<0.001	<b>&lt;0.001</b>
TMT part B	166.41 ± 116.04	77.23 ± 34.59	53.50	<0.001	<b>&lt;0.001</b>
<i>Visuospatial abilities</i>					
Copying drawings	10.08 ± 2.20	12.56 ± 1.42	84.12	<0.001	<b>&lt;0.001</b>
JOL	19.35 ± 4.96	25.11 ± 4.42	66.73	<0.001	<b>&lt;0.001</b>
<i>Language</i>					
Nouns denomination task	9.81 ± 0.45	9.91 ± 0.42	2.32	0.129	1.000
Verbs denomination task	9.01 ± 1.24	9.69 ± 0.73	21.33	<0.001	<b>&lt;0.001</b>
<i>Memory</i>					
Prose Recall Test	9.53 ± 3.21	12.71 ± 3.48	40.38	<0.001	<b>&lt;0.001</b>
RAVLT-Free Recall	5.79 ± 3.36	7.67 ± 3.07	15.51	<0.001	<b>0.003</b>
RAVLT-Intrusions	1.16 ± 1.79	1.13 ± 2.73	0.00	0.934	1.000
RAVLT-Recognition Enhancement	4.58 ± 3.94	4.83 ± 3.34	0.20	0.649	1.000
<i>Behavioural measures</i>					
Beck Depression Inventory	7.62 ± 7.69	7.84 ± 7.20	0.04	0.843	1.000
Parkinson Anxiety Scale	9.78 ± 8.83	10.86 ± 7.70	0.77	0.380	1.000
Apathy Evaluation Scale	31.35 ± 8.15	30.36 ± 7.55	0.73	0.393	1.000
PD-Sleep Scale	121.51 ± 21.79	121.20 ± 25.18	0.00	0.935	1.000
Epworth Sleepiness Scale	3.88 ± 3.38	3.67 ± 2.96	0.19	0.663	1.000
Parkinson Fatigue Scale	2.06 ± 1.03	2.06 ± 0.98	0.00	0.964	1.000
<i>Quality of life</i>					
PDQ-39	17.70 ± 12.87	13.15 ± 7.93	6.67	0.011	0.303

Note. Data were reported as mean ± standard deviation or count (percentage); HY, Hoehn and Yahr; UPDRS, Unified Parkinson's Disease Rating Scale; TMT, Trail Making Test; MCST (Nelson's modification), Modified Card Sorting Test; JOL, Judgement of line orientation test; RAVLT, Rey's Auditory Verbal Learning Test; PDQ-39, 39-item Parkinson's disease questionnaire; Adj-*p* represents *p*-value corrected for multiple comparisons using the Bonferroni procedure, and statistically significant differences are shown in **bold**.