

Supplementary Table 1. Demographic data of participants with PD with normal cognition, mild cognitive impairment, and dementia

	PD-NC (n = 1,848)	PD-MCI (n = 137)	PDD (n = 84)	p values			
				Comparison among three groups	PD-NC vs. PD-MCI	PD-NC vs. PDD	PD-MCI vs. PDD
Sex, female	1,293 (70.0)	114 (83.2)	70 (83.3)	< 0.001			
Age (yr)	64.41 ± 9.71	70.58 ± 8.76	70.24 ± 7.66	< 0.001	< 0.001	< 0.001	> 0.999
Education (yr)	15.80 ± 2.71	15.66 ± 2.85	14.58 ± 4.19	0.031	> 0.999	< 0.001	0.017
Duration of PD (mon)*	52.29 ± 27.28	60.44 ± 27.26	66.60 ± 24.02	< 0.001	0.002	< 0.001	0.306
MDS-UPDRS III total score*	27.64 ± 12.06	34.59 ± 13.63	39.79 ± 16.84	< 0.001	< 0.001	< 0.001	0.008
Hoehn & Yahr stage*				< 0.001			
1	326 (17.6)	13 (9.5)	7 (8.3)				
2	1,405 (76.0)	98 (71.5)	53 (63.1)				
3	98 (5.3)	25 (18.2)	18 (21.4)				
4	17 (0.9)	1 (0.7)	5 (6.0)				
5	2 (0.1)	0 (0.0)	1 (1.2)				
SGDS total score*	5.40 ± 1.47	6.11 ± 1.85	7.04 ± 2.02	< 0.001	< 0.001	< 0.001	< 0.001
MoCA score	27.26 ± 2.38	22.37 ± 3.99	19.63 ± 5.07	< 0.001	< 0.001	< 0.001	< 0.001

Values are presented as mean ± standard deviation of n (%). *data obtained from the time point of MoCA. PD, Parkinson's disease; PD-NC, PD with normal cognition; PD-MCI, PD with mild cognitive impairment; PDD, PD dementia; MDS-UPDRS, Unified Parkinson's Disease Rating Scale by the Movement Disorders Society; SGDS, short version of the Geriatric Depression Scale; MoCA, Montreal Cognitive Assessment.