

Supplementary Table 2. Feature importance: relative contribution of diagnostic criteria in classifying cognitive impairment in Parkinson's disease

Methods	Top 10 features in the order of importance	Coefficient
Machine learning with domain scores	Years in education	2.5478
	Subtotal scores of orientation	-2.2088
	Subtotal scores of memory	-1.4656
	Subtotal scores of visuospatial/ executive function	-1.4333
	Subtotal scores of attention	-1.3357
	Motor UPDRS scores	1.0644
	Subtotal scores of language	-0.9365
	Cognitive complaint by a care-giver	0.5959
	Age	-0.3715
	Subtotal name	-0.3137
Machine learning with domain scores and pentagon copying test	Years in education	2.7369
	Subtotal scores of orientation	-1.9099
	Subtotal scores of memory	-1.5970
	Subtotal scores of visuospatial/ executive function	-1.1717
	Pentagon copying test	-1.0646
	Subtotal scores of language	-1.0137
	Subtotal scores of attention	-0.8725
	Motor UPDRS scores	0.8585
	Cognitive complaint by a care-giver	0.6625
	Age	-0.5495

The feature scores, assigned by the support vector machine model, were averaged across all trained models to rank features in descending order of importance. Negative scores signify features crucial for classifying a patient as having normal cognition, whereas positive scores denote features indicative of cognitive impairment. UPDRS, Unified Parkinson's Disease Rating Scale by the Movement Disorders Society.