

	lowest tertile	mid tertile	highest tertile	p
Age at examination	66.2 ($\pm$ 9.9), N= 157	66.3 ($\pm$ 8.9), N=158	63.8 ($\pm$ 10.5), N=156	0.040
Age at onset	59.1 ($\pm$ 10.8), N=157	58.6 ($\pm$ 9.3), N=158	56.5 ($\pm$ 11.2), N=156	0.067
Disease duration	7.2 ($\pm$ 5.0), N=157	7.6 ($\pm$ 4.9), N=158	7.2 ($\pm$ 5.3), N=156	0.703
UPDRS III	26.0 ($\pm$ 10.5), N=149	27.1 ($\pm$ 13.3), N=149	25.0 ($\pm$ 10.3), N=144	0.285
MOCA	24.8 ($\pm$ 3.9), N=128	25.1 ($\pm$ 4.1), N=140	25.9 ($\pm$ 3.5), N=135	0.055
Prevalence of onset cognitive impairment	36/72 (50.0%)	43/89 (48.3%)	26/94 (27.7%)	0.004
BDI II	9.5 ($\pm$ 6.7), N=116	9.1 ($\pm$ 7.8), N=119	8.7 ($\pm$ 6.8), N=112	0.684
<i>KL-VS</i> haplotype	23/139 (16.5%)	28/139 (20.1%)	36/119 (30.3%)	0.024
beta-amyloid 1-42	700.1 ($\pm$ 280.6), N= 146	728.6 ($\pm$ 276.7), N=153	738.7 ($\pm$ 250.6), N=150	0.443
h-TAU	245.0 ($\pm$ 135.1), N=146	250.0 ($\pm$ 117.9), N=153	255.8 ($\pm$ 139.7), N=150	0.778
p-TAU	41.9 ($\pm$ 17.7), N=142	42.6 ($\pm$ 16.1), N=149	42.1 ($\pm$ 17.2), N=149	0.925
NfL	939.1 ($\pm$ 600.2), N=132	1050.6 ($\pm$ 1106.7), N=151	918.5 ($\pm$ 544.9), N=147	0.313
alpha-synuclein	589.8 ($\pm$ 315.0), N=149	637.8 ($\pm$ 293.5), N=154	614.5 ($\pm$ 287.5), N=141	0.377

Table 1: Demographic data in patients with Parkinson's disease and levels of neurodegenerative proteins (in pg/ml) (**PD total cohort**) with stratification for lowest, middle and highest tertile of CSF-Klotho-levels. Analysis of variance (ANOVA) with significant p-values $\leq$ 0.05 presented in bold letters. UPDRS III: Unified Parkinson's Disease Rating Scale part III; MOCA: Montreal Cognitive Assessment; BDI II: Beck's Depression Inventory. Post-hoc-Tests with adapted p-values according to Bonferroni were applied. For comparison of the prevalence of onset of cognitive impairment (MoCA $\leq$ 25) during study and the prevalence of *KL-VS*-variant, chi-squared test was applied.