

Supplementary Material

Table S1: The effect of the relative TL on the occurrence of dementia in PD patients.

	OR	95%CI	p-value
Telomere length	0.15	0.03–0.88	0.024

Adjustment for age at inclusion and disease duration

	OR	95%CI	p-value
Telomere length	0.56	0.097–3.26	0.509
Age at inclusion	1.18	1.11–1.25	<0.001
Disease duration	1.13	1.07–1.19	<0.001

Table S2: The effect of the relative TL on the current LED which reflects the symptomatology of Parkinson's disease.

	B	95% CI	p-value
Telomere length	-36.39	-407.7–334.9	0.847

Adjustment for age at inclusion and disease duration

	B	95% CI	p-value
Telomere length	18.34	-309.11–345.79	0.912
Age at inclusion	-9.87	-16.91 –-2.83	0.00623
Disease duration	38.32	28.44 –48.20	9.07e-13

Adjustment for the genetic factors of the oxidative stress pathway

	B	95% CI	p-value
Telomere length	14.48	-317.69–346.65	0.932
Age at inclusion	-9.96	-17.09 –-2.82	0.00649
Disease duration	38.48	28.45 –48.51	1.55e-12
<i>GPX1</i> rs1050450	-22.29	-133.36–88.78	0.693
<i>CAT</i> rs10836235	-11.82	-157.59–133.96	0.873
<i>CAT</i> rs1001179	-17.13	-141.05–106.79	0.785
<i>SOD2</i> rs4880	26.94	-69.82–123.71	0.584

Adjustment for the genetic factors of the inflammation pathway

	B	95% CI	p-value
Telomere length	43.58	-285.74–372.89	0.794
Age at inclusion	-9.70	-16.77 –-2.61	0.00760
Disease duration	37.63	27.60–47.66	4.08e-12
<i>IL1B</i> rs16944	13.68	-140.2–167.62	0.861
<i>IL1B</i> rs1143623	104.55	-61.12–270.23	0.215
<i>TNFA</i> rs1800629	1.67	-129.13–132.47	0.980
<i>IL6</i> rs1800795	-62.03	-167.78–43.73	0.249

Table S3: Effect of the relative TL on the time to occurrence of motor fluctuations.

	HR	95% CI	p-value
Telomere length	3.24	1.28–8.21	0.0134

Adjustment for age at inclusion and disease duration

	HR	95% CI	p-value
Telomere length	2.54	0.90–7.14	0.0781
Age at inclusion	0.95	0.93–0.97	5.34e-06
Disease duration	0.98	0.94–1.015	0.215

Table S4: Effect of the relative TL on the time to occurrence of dyskinesia.

	HR	95% CI	p-value
Telomere length	0.79	0.231–2.67	0.698

Adjustment for age at inclusion and disease duration

	HR	95% CI	p-value
Telomere length	0.294	0.071–1.21	0.0904
Age at inclusion	0.931	0.91–0.95	2.27e-09
Disease duration	0.958	0.92–1.0013	0.0571