

# Telomere length in Parkinson's disease: A meta-analysis

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Parkinson's disease (PD) is a common and severe movement disorder. Differences in telomere length (TL) have been reported as possible risk factors for several neuropsychiatric disorders, including PD. Results from published studies for TL in PD are inconsistent, highlighting the need for a meta-analysis. In the current work, a meta-analysis of published studies for TL in PD was carried out. PubMed, Web of Science and Google Scholar databases were used to identify relevant articles that reported TL in groups of PD patients and controls. A random-effects model was used for meta-analytical procedures. The meta-analysis included eight primary studies, derived from populations of European and Asian descent, and did not show a significant difference in TL between 956 PD patients and 1284 controls ( $p$  value: 0.246). Our results show that there is no consistent evidence of shorter telomeres in PD patients and suggest the importance of future studies on TL and PD that analyze other populations and also include assessment of TL from different brain regions. © 2016 Elsevier Inc.

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Meta-analysis

Movement disorders

Parkinson's disease

Telomeres

genomic DNA

Article

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brain region

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