

**Feasibility and Preliminary Effects of using a Music-based, Rhythm-modulating
Wearable Sensor System in the Community in Persons With Parkinson Disease**

Statistical Analysis Plan

NCT Number: NCT04891107

Date of Document: July 27, 2023

TEMPO Statistical Analysis Plan

Normality of distribution will be confirmed using Shapiro-Wilk test. Given the preliminary nature of this study, adjustments are not planned to account for multiple comparisons across outcomes.

Primary Outcomes:

- > Feasibility metrics will be measured descriptively
- > PDQ-39 mobility dimension will be assessed using paired t-tests ($\alpha = .05$) to compare baseline and post-intervention values

Secondary Outcomes:

> Change in disease severity (MDS-UPDRS III), walking endurance (6MWT), gait speed (10MWT), change in mobility (FTSTS) and overall quality of life (PDQ-39 total score) will be assessed using paired t-tests ($\alpha = .05$) to compare baseline and post-intervention values.

> Change in daily steps and moderate intensity minutes will be assessed using paired t-tests ($\alpha = .05$) to compare daily walking activity at baseline (days 1-4) to daily walking activity during the intervention (days 5-8).