Dear Dr. Isidre Ferrer and the Frontiers in Aging Neuroscience editorial board,

We wish to submit an Original Research article titled “Parkinson’s Disease Subtypes Identified from Cluster Analysis of Motor and Non-Motor Symptoms” to Frontiers in Aging Neuroscience. We confirm that this work is original, has not been published, and is not under review for publication elsewhere. This work is not part of a Research Topic.

In this paper, we present the largest cluster-analysis based study of motor- and non-motor symptoms from an international, multi-centre cohort of Parkinson’s disease patients. We first replicate several subtypes present in the literature and then confirm the role of non-motor symptoms in Parkinson’s disease subtyping by suggest several new subtypes characterized by clinically-relevant non-motor symptoms. We believe the findings from this study are novel and are directly relevant to the readership, as they constitute a detailed examination of non-motor heterogeneity in PD patients with clinical implications for subtype-specific treatment packages, further studies of natural history, and more.

Please address correspondence concerning this manuscript to Kallol Ray Chaudhuri at [ray.chaudhuri@nhs.net](mailto:ray.chaudhuri@nhs.net).

Thank you for your consideration of this manuscript.

Sincerely,

Jesse Mu