Dear Dr. Robert Gross and the Neurology editorial board,

We wish to submit an article entitled “Parkinson’s disease subtypes identified from cluster analysis of motor and non-motor symptoms” to Neurology. We confirm that this work is original, has not been published, and is not under review for publication elsewhere.

In this paper, we present the largest cluster-analysis based study of motor- and non-motor symptoms from an international, multi-centre cohort of PD patients. We confirm several subtypes present in the literature and 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 significant clinical implications.

All authors have agreed to conditions noted on the Authorship Agreement Form. I, Jesse Mu, take full responsibility for the data, the analyses and interpretation, and the conduct of the research. I have full access to all of the data. I have the right to publish any and all data separate and apart from any sponsor.

The Methods section of our manuscript includes a statement that all relevant IRBs and regional ethics committees approved the use of humans for the studies in the manuscript. Additionally, we have received consent forms from any participant in the studies described and can produce them if requested.

Please address all 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